

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The Mining Journal is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2368.—VOL. LI.

LONDON, SATURDAY, JANUARY 8, 1881.

[WITH SUPPLEMENT.] PRICE SIXPENCE PER ANNUM, BY POST £1 4s.

**MR. JAMES H. CROFTS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER,**  
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.  
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.  
BUSINESS negotiated in Stocks and Shares not having a general market value.  
Every Friday a general and reliable List issued (a copy of which will be forwarded regularly on application), containing closing prices of the week.

**MINES INSPECTED.**  
BANKERS: CITY BANK, LONDON—SOUTH CORNWALL BANK, ST. AUSTELL.

**SPECIAL DEALINGS in the following, or part:—**  
50 Aberllyn, 12s. 6d. 75 Herodfoot, 16s. 25 Pestarena, 8s.  
25 Almada, 10s. 50 Hington Down, £1 1/2 25 Ruby, £2 8s. 9d.  
50 Carnarvon Cop., 16s. 25 Javali, 6s. 3d. 20 Richmond, £16 12s. 6d.  
10 D'Eresby Con., £3 3/4 25 Leadhills, £2 15s. 10 Roman Grav., £9 17 6  
10 Devon Consols, £17 25 Marke Valley, £1 11 3 50 S. Indian Gold, £2 3 9  
40 East Crebor, 17s. 40 North D'Eresby, 25s. 20 So. Condurrow, £11 1/4  
25 East Caradon, £1 1/4 150 Nouv. Monde, £1 1/4 20 South Darren, £2 1 3  
20 E. Roman Grav., 14s. 50 N. Penruthal, £11 8 50 So. E. Wynad, £1 16 3  
20 East Van, £1 15s. 50 Pandora, 16s. 50 S. Penruthal, 16s. 3  
50 Flagstaff, £1 6s. 3d. 50 Pen-y-Orsedd, £1 1/4 60 Tankerville Gt. Con.,  
100 Frontino, £5 2s. 6d. 50 Port Phillip, 11s. 75 Trevince Con., £1 5s.  
25 Glenrock, £1 11s. 3d. 100 Potosi. 40 West Godolphin, £2 3/4  
50 Glenroy, 12s. 3d. 50 Prince of Wales, 21s. 3 50 West Phoenix, £2.  
25 Grogwinion, £3 1s. 3 75 Parys Copper, £1 1s. 40 Wheel Crebor, £4 3/4.

\* \* SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

**SPECIAL BUSINESS in North D'Eresby Mountain, West Godolphin, and Wheel Crebor at close prices.**  
**RAILWAYS—SPECIAL BUSINESS.**  
**FOREIGN BONDS—SPECIAL BUSINESS.**  
**AMERICAN STOCKS AND SHARES—SPECIAL BUSINESS.**  
Fortnightly accounts opened on receipt of the usual cover in these and all Stock Exchange Securities.

JAMES H. CROFTS, 1, FINCH LANE, LONDON.  
ESTABLISHED 1842.

**MR. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER**  
44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

**IMPORTANT TO SHAREHOLDERS AND INVESTORS.**

There is still a rush for FOREIGN GOLD MINES, to the neglect of SOUNDER INVESTMENTS nearer home, but signs of a coming reaction are not wanting, and it may be safely predicted that the present mania must, sooner or later, result in disappointment and loss to the majority of those persons who place their money in such schemes at the extravagant rates now ruling. On the other hand, it cannot be denied that a very small proportion of the amount thus lavishly subscribed, if properly and honestly devoted to the working and development of SOUND BRITISH MINES, could hardly fail to produce very profitable results within a comparatively short period. Reference is here made more particularly to TIN Mines, for which there is an excellent prospect in the immediate future. The market for this metal is steady, and there is every probability that a considerable advance will take place early in the New Year; but with Tin even at its present price, good profits can be made and maintained. Investors will, therefore, do well to turn their attention in the direction here indicated, as, by a judicious purchase at present quotations, they may not only ensure good dividends, but a substantial profit on their outlay within the next few months. The following Mines are strongly recommended for Safe and Profitable Investment, and shares should be secured at once:—

**WHEAL GRENVILLE.**—This is one of the best mines in Cornwall, and will shortly occupy a prominent position. A Dividend will be declared at the next meeting (in January), and regular and increasing returns may be confidently relied upon.

**WEST GODOLPHIN.**—This valuable property is about to be vigorously re-worked under the same management as Wheal Grenville. Profitable returns may be confidently expected early in the present year, and shares are likely to advance 100 or 200 per cent.

**WHEAL PEEVOR.**—This is one of the best Dividend Mines in the List, and, at present price, will pay an Investor over 13 per cent. per annum. A quarterly dividend of £1 per share was declared on the 21st inst.

**WEST PEEVOR** (adjoining Wheal Pevor, on the same lodes).—This mine is rapidly approaching a Dividend position, and will probably prove as great a success as its neighbour.

**NEW PEEVOR** (adjoining West Pevor, on the same lodes).—This is a comparatively young mine, but possessing very good prospects, and the shares are worth buying for a rise.

**WHEAL BOYS.**—This Mine is situated in the rich district immediately adjoining Wheal Pevor to the south. The lodes (eight in number) are the same as those of the celebrated Treskerby Mine. Full particulars of the property may be had on application. These shares are recommended for an early and substantial rise.

**N.B.**—The last Three Mines are all under the same excellent partnership and management as Wheal Pevor.

**MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—**  
25 Arendal, 100 Pestarena, 8s.  
100 Almada, 9s. 6d. 25 Frontino, £5 1/2 25 Panucillo, £6 1/2  
50 Blue Tent, 36s. 100 Glenroy, 13s. 6d. 10 Richmond, £16 12s. 6d.  
75 Bodidris, 15 Great Holway, 15 Roman Gravels.  
5 Cape Copper, £42 1/2 25 Hington, 31s. 6d. 25 Ruby, £2 8s. 9d.  
60 Consolidated, 12s. 50 Herodfoot, 5 So. Frances, £12 1/2  
3 Carn Brea, 50 Hultafell, 34s. 50 South Indian, £2 3s. 6  
40 Colorado, £2 16s. 3d. 100 Hulton Glenrock, 30s. 6  
10 Copiapo, £14 1/4 75 La Plata, £2 1s. 3d. 5 Tincroft, 5  
50 Carnarvon, 16s. 6d. 30 Mellanear, £5 1/4 25 Wheal Boys, £3 3/4  
50 Devala-Moyar, £2. 10 Mona, £15 1/4 10 Wheal Pevor.  
35 Derwent, £2 1/4 60 No. Herodfoot, 11s. 40 W. Godolphin, £2 3/4  
100 Don Pedro, 14s. 6d. 30 New Pevor, £2 1/4 15 West Pevor, £16 1/2  
3 Dolcoath, 100 New Quebrada, 100 Wh. Jewell, 12s. 6d.  
15 Devon Consols, £17 1/4 100 Nouveau Monde, 75 West Holway.  
20 Eberhardt, £3 13s. 9d. 50 Potosi, 13s. prem. 50 Wheal Grenville, £11 1/4  
2 East Pool, 100 Pen-y-Orsedd, 23s. 30 Wheal Sisters, £2 1/4  
40 Emma, £3 8s. 9d. 75 Parys Copper, 100 Yorke Peninsula, 7s.  
60 Port Phillip, 12s.

**SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.**  
Mr. Bumpus devotes special attention to these Securities, and is in a position to afford reliable information and advice to intending investors and others.

**WILLIAM HENRY BUMPUS, SWORN BROKER.**  
OFFICES: 44, THREADNEEDLE STREET, LONDON, E.C.  
ESTABLISHED 1867.

**MR. GEORGE BUDGE, STOCK AND SHARE DEALER**  
9, GRACECHURCH STREET, LONDON, E.C. (Established 28 years).  
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR COMMISSION.

Notice to Investors and Speculators.

**MR. BUDGE has DEALINGS in:—**  
200 Brazilian, 50 Gawnon, 60 New Kitty.  
75 Bodidris, 100 Glenroy, 70 Nouveau Monde.  
60 Bedford United, 20 Grogwinion, 70 Port Nigel.  
50 Birdseye Creek, 30 Glenrock, 100 Prince of Wales.  
2 Carn Brea, 150 Hungarian Copper, 25 Panucillo.  
5 Devon Great Consols, 100 I. X. L., 100 Potosi.  
100 Don Pedro, 100 Lady Ashburton, 20 Ruby.  
5 Denbighshire Cons., 105 Landegla, 100 South Devon.  
85 East Devon Consols, 60 Lead Era, 75 South Indian.  
120 Exchequer, 85 La Plata, 50 West Kitty.  
45 East Caradon, 100 Mona, 100 Wheal Jewell.  
125 East Crebor, 65 Morfa Du, 50 West Phoenix.  
15 Frongoch, 120 Mysore Reefs, 45 West Caradon.  
25 North D'Esby, 100 Wynad Perseverance.

**SPECIAL BUSINESS in Frongoch, Grogwinion, Devon Great Consols, Gawnon, Wheal Coates, Wheal Kitty, New Kitty, Glenroy, Roman Gravels, and Yatwith.**

**BRITISH AND FOREIGN MINING OFFICES.**

**Messrs. PETER WATSON AND CO.,**  
18, AUSTIN FRIARS,  
OLD BROAD STREET, LONDON, E.C.  
BANKERS: THE ALLIANCE BANK (Limited).

**Messrs. PETER WATSON AND CO.'S**  
BRITISH AND FOREIGN MONTHLY MINING NEWS  
—STOCK AND SHARE INVESTMENT NOTES—MINES,  
MINERALS, AND METAL MARKETS—SHARE LIST,  
No. 825, VOL. XV., for DECEMBER month, is now ready,  
and will be sent to customers on application.

Annual Subscription..... 5s. | Single Copy..... 6d.

**Messrs. PETER WATSON AND CO.,**  
18, AUSTIN FRIARS, E.C.

**MR. ALFRED E. COOKE,**  
DEALER in BRITISH AND FOREIGN STOCKS AND SHARES  
OF EVERY DESCRIPTION.  
76, OLD BROAD STREET, LONDON.  
ESTABLISHED 1853.

**THE INVESTORS' GAZETTE.**  
Ready last evening. SPECIAL NEW YEAR'S NUMBER. Post free three stamps. Published by

ALFRED E. COOKE,  
76, OLD BROAD STREET, LONDON.

(Over 14 years at the above offices, adjoining the Stock Exchange, with which they are in DIRECT TELEGRAPHIC COMMUNICATION.)

**RECENT RECOMMENDATIONS.**  
As instances of the large profits made by sound advice, the following are given as some of the shares recommended in the INVESTORS' GAZETTE:—

	Recommended at	Price since
South Darren.....	£ 1 1/4	£ 3 10 0
East Lovell.....	1 10 0	5 0 0
Herodfoot.....	1 10 0	4 10 0
Prince of Wales.....	7s. 6d.	1 5 0
Carn Brea.....	80 0 0	105 0 0
New Quebrada.....	5 5 0	6 10 0
Devon United.....	1 10 0	2 10 0
Wheal Pevor.....	4 0 0	36 0 0
West Pevor.....	2 0 0	17 0 0
South Frances.....	4 0 0	18 0 0
Crebor.....	2 0 0	13 0 0
Devon Consols.....	5 0 0	20 0 0
East Caradon.....	1 0 0	7 0 0
Roman Gravels.....	9 0 0	12 0 0
West Devon.....	2 0 0	4 0 0
Basset.....	1 0 0	6 0 0
North D'Eresby.....	1 0 0	1 5 0

For future selections which are already COMMENCING TO RISE, send for the INVESTORS' GAZETTE.

ALFRED E. COOKE, 76, OLD BROAD STREET, LONDON.

**JOHN B. REYNOLDS,**  
37, WALBROOK, LONDON, E.C.  
ESTABLISHED 25 YEARS.

BANKERS: LONDON JOINT STOCK.

**WEST KITTY MINE.**

A ready market for the Sale or Purchase of these Shares can be found at this office. Mr. REYNOLDS continues to recommend them for investment. Mr. REYNOLDS refers to his article on page 33.

**REYNOLDS**

ON THE MARKETS AND THE FLUCTUATIONS,  
A short Pamphlet for the Investor and the Uninitiated. Highly commended by the Press. NOW READY.

Forwarded gratis on application to  
JOHN B. REYNOLDS,  
37, WALBROOK, LONDON, E.C.

**FERDINAND R. KIRK, STOCKBROKER,**  
5, BIRCHIN-LANE, LONDON, E.C.

**AMERICAN SHARES AND BONDS.**—Attention was recently called in "The Week" to Erics when at 39, to Readings at 16, and to Pennsylvania at 60. Despite the great advance still higher prices during 1881 may confidently be relied upon. Fifty shares of each, or any larger number may be secured for the account on receipt of the usual cover. New York Central and Illinois Central deserve attention. Money is to be made by operating in Atlantic and Great Western Mortgage Bonds.

**PENNINGTON AND CO., SWORN BROKERS,**  
3, ROYAL EXCHANGE BUILDINGS, E.C.  
Transact business in every description of Stocks and Shares.  
ESTABLISHED 1869.—BANKERS: ALLIANCE.

**TREVINCE CONSOLS.**—This mine continues to improve, and will, in our opinion, shortly occupy a prominent position. We most strongly advise immediate purchase of shares for a rapid rise. Price 25s.  
**SPECIAL BUSINESS in Devonport and Tiverton and Gray's Brewery, New Cathedral, New Gold Run, Gold Coast, and Chapel House shares.**

**Messrs. ENDEAN AND CO., STOCK AND SHARE DEALERS,**  
85, GRACECHURCH STREET, LONDON, E.C.  
ESTABLISHED 1861.

BANKERS: LONDON AND WESTMINSTER, Lothbury; and BARCLAY, BEVAN, and CO., Lombard-street, E.C.

**HORACE J. TAYLOR, STOCK AND SHARE DEALER,**  
(Late of the PORT PHILLIP AND VICTORIA [London] MINING COMPANIES, Limited.)  
38, GREAT ST. HELEN'S, LONDON, E.C.

Business transacted in every description of Stocks and Shares. Fortnightly accounts opened on receipt of usual cover.  
West Chiverton, West Lisburne, and East Lovell should be secured for an important rise.

BANKERS: CENTRAL BANK OF LONDON (Limited).

**MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,**  
29, BISHOPSGATE STREET, LONDON, E.C.

Can sell the following SHARES at prices annexed:—  
20 Bedford United, 3s. 100 Grey's Brewery, with  
25 Brazilian Gold, 23s. div., £4 7s. 6d.  
10 Bwlch United, 20 Herodfoot, 17s. 6d.  
40 Colorado, £3. 20 Hington, £1 10s.  
100 Chontales, 5s. 6d. 100 I. X. L., 6s. 3d.  
25 Devon Gt. Uni., £2 3/4 25 La Plata, £2 1/4  
50 Don Pedro, 13s. 3d. 15 Leadhills, £2 1/4  
75 Devon and Tiverton 30 Marke Valley, £1 1/4  
Brewery, £4 5s. 20 Minera, £9 1/4  
10 Devon Consols, £17 1/4 20 North Alfred, £2 1/4  
20 Eberhardt, £3 1/4 20 New Quebrada, £6 1/4  
100 Exchequer, 6s. 6d. 25 New W. Caradon, 16s.  
20 East Caradon, £1 1/4 50 Nouveau Monde, 35s.  
10 East Lovell, £4 1/4 50 Parys Copper, 20s. 3d.  
25 Emma, £3 1/4 20 Panucillo, £6 1/4  
25 Flagstaff, £1 7s. 6d. 50 Prince of Wales, 21s. 3  
20 Frontino, £5 1/4

Particulars of some really cheap and good mining investments on application.

**THE "DIFFERENTIAL" PUMPING ENGINE**  
(DAVEY'S PATENT),  
FOR

DRAINING MINES, WATER SUPPLY OF TOWNS, IRRIGATION,  
SUPPLYING DOCKS, PUMPING SEWAGE, and GENERAL  
PUMPING PURPOSES.

**HATHORN, DAVEY, AND CO.,**  
LEEDS.

HATHORN, DAVEY, and Co. have Patterns of "Differential" Engines of all sizes, from 5 to 500-horse power, and have facilities for supplying very powerful Engines and Pumps at a short notice.  
See Illustrated Advertisement every alternate week.

**MR. CHARLES THOMAS**  
MINING AGENT, STOCK AND SHARE DEALER,  
3, GREAT ST. HELEN'S, LONDON, E.C.

**MR. ALFRED THOMAS,**  
MINING AGENT, AND STOCK AND SHARE DEALER,  
10, COLEMAN STREET, LONDON, E.C.

Just published.  
**MINING INVESTMENTS.**  
"What to Select, and What to Avoid," by ALFRED THOMAS 10, Coleman street, London, E.C. Will be forwarded on receipt of 12 stamps.

ESTABLISHED 1852.  
**HENRY GOULD SHARP,**  
STOCK AND SHARE BROKER, 42, POULTRY LONDON, E.C.  
Bankers—London and County Bank, Lombard-street, London, E.C.

**MR. EDWARD ASHMEAD, 2, DRAPER'S GARDENS,**  
LONDON, E.C.  
MINING SECRETARY, AUDITOR, AND ACCOUNTANT.

**MR. E. J. BARTLETT, BRITISH AND FOREIGN STOCK**  
AND SHARE DEALER, No. 30, GREAT ST. HELEN'S, LONDON, E.C.

**EAST LOVELL.**—Further improvement in market value expected. Special business dealings in Rhosmor, North Hendre, West Godolphin, Prince of Wales, Roman Gravels, and Mysore Reef Gold.

**MR. THOMAS THOMPSON, JUN., STOCK BROKER,**  
16, ST. SWITHIN'S LANE, E.C.

Mr. THOMPSON transacts business in every species of Stock Exchange and Mining Securities.  
Mr. THOMPSON affords reliable information to investors, and can give, when desired, a list of first-class Stocks and Shares, yielding 4 to 10 per cent. dividends upon present prices.  
Mr. THOMPSON'S weekly Circular may be had on application.

**MR. JOHN RISLEY, STOCK AND SHARE BROKER,**  
38, CORNHILL, LONDON, E.C.

ESTABLISHED 20 YEARS.  
WEST CARADON, PARYS, and NEW WEST CARADON specially recommended.  
SHARES BOUGHT OR SOLD ON COMMISSION.

**EKINS AND CO., STOCK AND SHARE DEALERS**  
14, QUEEN VICTORIA STREET, LONDON, E.C.  
Special information respecting Tin, Lead, and Copper Mines.

**MR. W. B. COBB, STOCK AND SHARE DEALER,**  
29, BISHOPSGATE-STREET, LONDON, E.C.  
Business transacted in every description of Stocks and Shares.  
Special Business in Potosi, Bwlch United, West Lisburne, and East Lovell.  
BANKERS: ALLIANCE BANK (Limited).

**MR. CHARLES J. SIMS,**  
MINING AGENT, STOCK AND SHARE DEALER,  
2, DRAPER'S GARDENS,  
LONDON, E.C.

**Messrs. THOMSON AND CO.,**  
STOCK AND SHARE DEALERS,  
44, THREADNEEDLE STREET, E.C.  
BANKERS: ROYAL EXCHANGE.

Business transacted in every description of Stocks and Shares.  
**TREVINCE CONSOLS.**—The lot in the new discovery still continues to yield fully 6 tons of copper ore per farm, and is increasing in value as depth is attained. The shares must shortly greatly improve in market value. Present price about 25s.

**JOHN BANTING ROGERS, STOCK AND SHARE DEALER,**  
ST. CLEMENT'S HOUSE, LOMBARD STREET, LONDON.

**MR. W. TREGELLAS, 40, BISHOPSGATE STREET**  
WITHIN, E.C.  
Deals in all descriptions of STOCKS and SHARES at close market prices, and is always in a position to do business in SANTA BARBARA, PITANGUI, and BRAZILIAN GOLD MINES.

**LAS CALDAS FREEHOLD MALACHITE COPPER MINING**  
COMPANY (LIMITED). See page 33.

Particulars of—  
Messrs. WARD AND CO., 184, PALMERSTON BUILDINGS,  
OLD BROAD STREET, LONDON.

**PARBOLA TIN MINE.**—See article in page 37 in to-day's Mining Journal.  
Full particulars and report can be obtained from Mr. MURCHISON, 8, Austin Friars, London, E.C.

Will be ready in a few days.  
**INDIAN GOLD MINES:** A Synopsis of the present position of GOLD MINING IN INDIA. Specially for Investors.  
Price 6d.; post free 6 1/2d.  
J. MILES TAPPAN and Co., 25, Finsbury Circus, London, E.C.

Price One Shilling.  
**MINING SHARES, AND HOW TO DEAL IN THEM.**  
Published for the Author at the MINING JOURNAL Office, 25, Fleet-street, E.C.

**FRANCIS FRANCIS,**  
CORN EXCHANGE CHAMBERS, CHESTER,  
Has SPECIAL BUSINESS in HALKYN DISTRICT DRAINAGE, RHYDALUN, RHOSMOR, NORTH HENDRE, and PEN-Y-ORSEDD.  
Also, in PITANGUI (Gold), BRAZILIAN GOLD MINES, SANTA BARBARA, and WEST FRONTINO.

**MR. JOHN L. M. FRASER,**  
(Fourteen Years at the Great Miners' Mines)  
CONSULTING MINING ENGINEER, &c.,  
GREENFIELD HOUSE, WREXHAM.

SPECIAL RECOMMENDS the immediate purchase at present prices of PANT-Y-MWYN and BRITISH SILVER-LEAD Shares, as important discoveries are daily expected that will increase their value from 200 to 300 per cent.  
ON SALE—HORIZONTAL, VERTICAL, and PORTABLE WINDING and PUMPING ENGINES, LIFTS OF PUMPS, PIT HEADS, SAW BENCHES, MINING STEEL, a complete SET of GOLD MINING PLANT, &c. Enquiries courted.  
GOLD, SILVER-LEAD MINE, LEASES, with MACHINERY, also LEAD SMELTING and DESILVERISING WORKS ON SALE or TO LET. Full particulars on application.







APPLICATION LIST CLOSES ON 13TH JANUARY, 1881.

# Devon Friendship Mining Company

(LIMITED)

Incorporated under the Companies Acts, with Limited Liability.

CAPITAL £60,000, IN SHARES OF £1 EACH.

5s. per Share payable with application, 5s. on Allotment, 5s. on 17th March, 1881, and 5s. on 17th June, 1881.

IF NO ALLOTMENT IS MADE THE DEPOSIT WILL BE RETURNED IN FULL.

## DIRECTORS.

H. W. LAMB, Esq., Anerley, Director of the D'Eresby Mountain Mining Company.  
JAMES MACFARLANE, Esq., Gresham Buildings, Director of the Wheal Crebor Mining Company.  
J. H. MURCHISON, Esq., F.R.G.S., 8, Austin Friars, E.C.  
SAMUEL YORK, Esq., Wolverhampton, Director of the Tankerville Great Consols, and the Devon Great United Mining Companies.

## BANKERS.

THE IMPERIAL BANK (Limited), Lothbury, London.

## SECRETARY AND OFFICE.

MR. J. H. A. SMITH, 8, AUSTIN FRIARS, LONDON.

## ABRIDGED PROSPECTUS.

This celebrated and very valuable and extensive mine is situated about 4 miles from Tavistock, Devon, and has been at work many years, during which it has yielded copper and other ores to the amount of nearly £1,500,000, out of which a very large sum has been expended on the mine (besides a limited capital); £113,436 has been paid in dues to the lessor, and £310,000 has been divided among the shareholders.

The present profits will be much increased as the levels on Bennett's lode are drained, and the directors confidently anticipate that dividends or interest on the capital will be paid the first year.

Although the directors fully expect, with the immense quantities of arsenical pyrites in these mines, that considerable profits from this source will be made, yet it is chiefly to the copper as well as to

returns of tin that they look for large and permanent favourable results. The quality of the copper ores from this property has hitherto been unusually good, while the tin found formerly was mostly thrown away.

In order to carry on the operations as quickly and cheaply as possible, boring machinery will be extensively used. It is further very important that the old part of the mines can be worked by water-power.

The only contracts are the following: one dated the 27th day of October, 1880, between Alfred Lanyon of the one part, and John Daw and John Henry Murchison of the other part; and one dated 11th November, 1880, made between the said John Daw and John Henry Murchison of the one part, and John Henry Augustus Smith, trustee for the company, of the other part. It will be observed that

Mr. John Henry Murchison, one of the vendors to the company, has agreed to be a director, and thus the shareholders will have the benefit of the services of a gentleman who is well known to be thoroughly acquainted with all details connected with mining, and whose interest as a shareholder will ensure his best attention to the affairs of the company.

A large number of the shares are already subscribed for, and applications for the remainder are requested to be made at once.

Full Prospectuses, with Reports, can be obtained at the office, 8, Austin Friars, London.

APPLICATION LIST WILL BE CLOSED ON 13TH INST.

## DEVON FRIENDSHIP MINING COMPANY (LIMITED).

NEXT THURSDAY, 13th inst., is the LAST DAY for sending in APPLICATIONS FOR SHARES.

Prospectuses and Reports can be obtained at the Office, 8, Austin Friars, E.C.  
6th January, 1881.

J. H. A. SMITH, Secretary.

## PROVINCIAL STOCK AND SHARE MARKETS.

**CORNISH MINE SHARE MARKET.**—Messrs. ABBOTT and WICKETT, stock and share brokers, Redruth (Jan. 6), write:—A moderate business has been done in Carn Brea and Tincroft shares at better prices. South Frances are also enquired for, but not many shares have changed hands. Quotations annexed:—Blue Hills, 3½ to 4; Carn Brea, 119 to 121; Cook's Kitchen, 12 to 12½; Dolcoath, 57½ to 58; East Pool, 35 to 35½; Mellanear, 5 to 5½; New Cook's Kitchen, 5½ to 6½; North Busy, 2½ to 2½; Pedn-an-drea, 1½ to 1½; Pendarves United, 9 to 10; Santa Gertrude, 175 to 180; South Condurrow, 10½ to 11; South Crofty, 9½ to 10; South Frances, 12 to 12½; Tincroft, 21½ to 22; West Basset, 14½ to 14½; West Peever, 16 to 16½; West Frances, 11 to 11½; West Tolgus, 45 to 50; West Seton, 16 to 18; Wheal Agar, 6 to 6½; Wheal Basset, 5 to 5½; Wheal Grenville, 10½ to 11; Wheal Kitty, 4 to 4½; Wheal Peever, 27 to 28; Wheal Prussia, 1½ to 2; Wheal Uny, 4½ to 4½.

—Mr. S. J. DAVEY, mine shareholder, Redruth (Jan. 6) writes:—Our market has been excited at times during the week, and prices of a few mines rapidly advanced, but afterwards a reaction set in, and prices gave way. A large business has been done within the week. To-day market is steady. Carn Brea shares advanced 20½, Dolcoath 2½, Tincroft 2½, and Cook's Kitchen 30s. The following are to-day's prices:—Blue Hills, 3½ to 4; Carn Brea, 119 to 121; Cook's Kitchen, 12½ to 12½ (call of 10s. paid); Dolcoath, 57½ to 58; East Lovell, 4 to 4½; East Pool, 35 to 35½; Killifreth, ½ to ½; Mellanear, 4½ to 5½; New Cook's Kitchen, 6 to 7; North Busy, 2½ to 2½; Pendarves United, 9 to 10; Pedn-an-drea, 1½ to 1½; South Condurrow, 10½ to 11; South Crofty, 10 to 10½; South Frances, 11½ to 12½; Tincroft, 21½ to 22; West Basset, 14½ to 15; West Frances, 11 to 11½; West Kitty, 2½ to 3½; West Peever, 16½ to 17; West Poldice, 3½ to 4; West Tolgus, 45 to 50; West Seton, 17 to 18; Wheal Agar, 5½ to 6; Wheal Basset, 5 to 5½; Wheal Comfort, 4 to 4½; Wheal Grenville, 10½ to 11; Wheal Jane, ½ to ½; Wheal Peever, 27 to 28; Wheal Kitty (St. Agnes), 4½ to 4½; Wheal Prussia, 1½ to 1½; Wheal Sisters, 2 to 2½; Wheal Uny, 4½ to 4½.

—Mr. J. H. REYNOLDS, stock and share broker, Redruth (Jan. 6), writes:—During the past week a good business has been done in all the leading tin shares, notably in Carn Brea, which have touched 125½, but close rather easier. Tincroft, South Frances, and Cook's Kitchen shares also enquired for. Subjoined are the closing prices:—Blue Hills, 3½ to 4; Carn Brea, 119 to 121; Cook's Kitchen, 12½ to 11; Dolcoath, 57½ to 57½; East Caradon, 1½ to 2; East Lovell, 4½ to 5; East Pool, 35 to 35½; Wheal Basset (Clitters), 3½ to 4; Herodfoot, 15s. to 20s.; Levant, 4 to 5; Marke Valley, 1½ to 1½; Mellanear, 4½ to 5; New Cook's Kitchen, 5½ to 6; North Busy, 2½ to 2½; North Herodfoot, 10s. to 12s. 6d.; North Levant, 5 to 6; North Penstruthal, 1½ to 1½; Pedn-an-drea, 1½ to 2; Pendarves United, 9 to 10; Phoenix, 2½ to 2½; Penhalis, 1½ to 2; South Caradon, 60 to 65; South Condurrow, 10½ to 11½; South Crofty, 9½ to 10; South Frances, 11½ to 12; Tincroft, 21½ to 22; Trugo, 1½ to 1½; West Basset, 14½ to 14½; West Chiverton, 1½ to 1½; West Frances, 11 to 11½; West Kitty, 2 to 2½; West Peever, 16½ to 17; West Poldice, 3½ to 4; West Seton, 16 to 19; West Tolgus, 45 to 50; Wheal Basset, 5 to 5½; Wheal Basset, 5 to 5½; Wheal Comfort, 4 to 4½; Wheal Grenville, 10½ to 10½; Wheal Jane, 12s. 6d. to 15s.; Wheal Jewell, 10s. to 15s.; Wheal Kitty, 4 to 4½; Wheal Peever, 27 to 27½; Wheal Prussia, 1½ to 2; Wheal Uny, 4½ to 4½. Cornish Bank shares 20½.

—Mr. JOHN CARTER, mine shareholder, Camborne (Jan. 6), writes:—A large business has been transacted during the week in a few of our leading mines, whilst most of the shares are neglected. Carn Brea advanced from 106 to 124, and just as quickly fell to 116, 118; Tincrofts improved to 22; Dolcoaths improved to 58½, and back again to 57½ sellers; South Frances improved to 12; East Pools, 35½, no change; and in other shares there is very little doing. On Monday the rise of 2s. in the tin standards was confirmed. At Cook's Kitchen meeting, held to-day, a loss of 115½ was shown on the 16 weeks' working, and a call of 10s. per share made. At New Cook's Kitchen meeting, held this day, a loss of 89½ was shown, and a call of 7s. per share made; and at West Frances meeting, also held to-day, a loss of 129½ was shown, and a call of 20s. per share made. Closing quotations herewith:—Blue Hills, 3½ to 3½; Carn Brea, 116 to 118; Cook's Kitchen, 11 to 12; Dolcoath, 57½ to 57½; East Botalack, 1½ to 1½; East Caradon, 1½ to 1½; East Pool, 35½ to 35½; Mellanear, 4½ to 5; New Cook's Kitchen, 5 to 5½; North Busy, 2½ to 2½; Pendarves United, 9 to 10; Penhalis, 1½ to 2; Pedn-an-drea, 36s. to 38s.; South Caradon, 60 to 65; South Condurrow, 11 to 11½; South Crofty, 10 to 10½; South Frances, 11½ to 12½; Tincroft, 21 to 22; West Basset, 14½ to 14½; West Frances, 10½ to 11½; West Peever, 16 to 16½; West Poldice, 3½ to 4; West Tolgus, 45 to 50; West Seton, 17 to 18; Wheal Agar, 5½ to 6; Wheal Basset, 5½ to 5½; Wheal Comfort, 4 to 4½; Wheal Grenville, 10½ to 10½; Wheal Jane, 13s. to 15s.; Wheal Peever, 27 to 28; Wheal Kitty, 4½ to 4½; Wheal Prussia, 1½ to 1½; Wheal Uny, 4½ to 4½.

—Mr. M. W. BAWDEN, Liskeard (Jan. 6), writes:—The new year has commenced with a good demand for most of the leading tin mines. Carn Brea, Cook's Kitchen, Dolcoath, South Frances, and Tincroft shares in request at an advance; but to-day the market is less active, and prices have slightly receded. Subjoined are closing quotations:—Bedford United, 1½ to 1½; Carn Brea, 115 to 117½; Gunnislake (Clitters), 3½ to 3½; Cook's Kitchen, 11½ to 12; Dolcoath, 57 to 58; Drake Walls, 1½ to 1½; Devon Consols, 15½ to 16; Devon United, 1½ to 2; East Caradon, 1½ to 1½; East Crebor, 1½ to 1½; East Herodfoot, 5½ to 6; East Pool, 36 to 37; Gawton United, 1½ to 1½; Glasgow Caradon, 1½ to 1½; Herodfoot, 1½ to 1½; Hingston Down, 1½ to 1½; Marke Valley, 1½ to 1½; New West Caradon, 1½ to 1½; North Herodfoot, 1½ to 1½; Old Gunnislake, 5½ to 6; Phoenix United, 2½ to 2½; Prince of Wales, 3½ to 3½; South Caradon, 5½ to 5½; South Crebor, 1½ to 1½; South Crofty, 10 to 10½; South Frances, 12½ to 13; Tamar Silver-Lead, 1½ to 1½; Tincroft, 20½ to 21; West Basset, 15 to 15½; West Caradon, 1½ to 1½; West Chiverton, 1½ to 1½; West Frances, 11 to 11½; call paid; West Crebor, 3½ to 3½; West Mary Ann, 1 to 1½; West Phoenix, 1½ to 1½; West Tolgus, 47 to 48; Wheal Agar, 8½ to 6½; Wheal Basset, 5 to 5½; Wheal Crebor, 4½ to 4½; Wheal Fortesue, 1½ to 2; Wheal Gren-

ville, 10½ to 11; Wheal Hony and Telawny, 2½ to 2½; Wheal Jane, 3½ to 7½; Wheal Peever, 27½ to 28; Wheal Sisters, 1½ to 2; Wheal Uny, 4½ to 4½.

**MANCHESTER.**—Messrs. JOSEPH R. and W. P. BAINES, sharebrokers, Queen's Chambers, Market-street (Jan. 6), write:—The market during the past week has ruled very strong almost throughout, and prices with few exceptions continue to rise, in some cases rapidly, though a slight lull is noticeable in the advance of speculative stocks, figures having reached a point at which it behoves operators to pause ere following the market still further. Whilst in these stocks no general fresh advance is to be noticed, figures remain firm at about the same as last week, though some are a trifle better. In commercial and industrial undertakings a very hopeful opinion is held with regard to the immediate future, and in the absence of any extraordinary disturbing influence prices seem very likely to move still higher. More discrimination is, however, observed by purchasers than was the case at the last rapid rise, and if this continues to be observed the advance promises to be more permanent, as the realisation of holders of shares, bought only in the hope of sympathetic movement, often causes relapses, not only in shares of a similar character, but in those of intrinsic value also. For the period the amount of business transacted has been very good, and the present and prospective condition of the markets fully bear out the hopes that have been entertained of the state of business at the turn of the year.

BANKS though not credited with many transactions keep moving against buyers, the only instance of adverse change being Manchester Joint-Stock, which are ½ lower, whilst Bank of Liverpool are ½, Manchester and Liverpool District ½, Manchester and County Bank ½, Liverpool Commercial ½, and Consolidated ½ higher. Oldham Joint-Stock continue steady at a shade under the best yet touched, whilst Bank of Oldham are some little enquired for at a slight discount.

**INSURANCE.**—The only day on which anything of any consequence was done in this class was Tuesday last, when several transactions were marked, besides which, however, little has been done; but here also the alterations for the better are in a decided majority, declines being marked in only two instances—Manchester Fire ½, and English and Scottish Boiler ½. On the other hand the following are higher: Liverpool and London, and Globe ½; Boiler Insurance and Steam Power, ¾; British and Foreign Marine ½; Maritime, ½; Royal Liverpool, ½; Sea, ½; and Pacific Life, 6d.

**COAL, IRON, AND MINING.**—This class has attracted more attention than for some weeks past, the figures realised showing pretty general advance, and a much better feeling to exist. Business to a fair extent has been done, and the alterations of quotations only show one decline, that of ½ on Darlington Iron; the advances being very numerous, as follow:—John Browns, 2; Bilbaw Iron, 1; Llynvi Tondur, 1; Nant-y-Glo and Blaenau pref., 1; Bolekows fully paid, ¾; Ebbw Vale, 5½; Sheepbridge Coal and Iron, 5½; Tharsis Sulphur and Copper, 7½; United States Rolling Stock, ½; Palermi's Shipbuilding, ½; Pelsalls, ½; and several others, ½ or ½ better.

**COTTON SPINNING AND MANUFACTURING.**—The shares on this class continue in brisk demand at higher rates. To-day some slight disposition to sell at best figures was noticeable, but there was no pressure, and buyers were plentiful at close upon rates asked. Should trade advances continue good, a fresh development of the rise may be expected, for many concerns are still below reasonable value, if the trade continues to furnish results as satisfactory as are being announced for the working of last quarter.

**TELEGRAPHS** have produced very few dealings. Anglos last Thursday had a rally of 1½, but relaxed again, and to-day quote ¾ lower; ditto deferred, ½; ditto pref., 1½. The only other case of movement is Western and Brazilian, which have fallen steadily with slight checks, and are now marked 1½ to 1½, or ½ lower than a week ago. CANALS no movement of importance. CORPORATION STOCK and kindred securities are still in request, and Manchester Corporation Stock is marked ¼ better. MISCELLANEOUS not much doing, but fairly steady.

**RAILWAYS.**—Since our last report values have not, as a whole, altered very materially, although in one or two instances the changes are distinct. North British have made a rapid rise of 1½, and Metropolitan District also show 1½ higher; while Chathams, their preference, and Sheffield and their deferred quote much weaker, the latter's traffic having this afternoon effect. Brighton, A. mark numerous fluctuations; but on comparison the change is now only slight. Canadians neglected, and reduction is marked all round. The American market has been active, Philadelphia and Reading being prominent in the movements, and the issue of the deferred shares at 30 per cent. being considered a bold attempt, and open to all applicants, although shareholders will have the preference. Eries, after being 53, have receded; while Pennsylvanias, though not at the best, quote much firmer. Atlantic and Great Western, first, second, and third mortgages, now described as New York, Pennsylvania, and Ohio Railway Mortgages, record an important advance. Oregon and California Bonds, Central Pacific, and Ohio and Mississippi are also up and looking better.

**HULL.**—Mr. W. FOWLER SUTTON, stock and share broker, St. Mary's Chambers (Jan. 6), writes:—The railway markets have generally been steady during the week, but do not show the advances looked for this account, as the speculative strength was probably exhausted during the last fortnight of the year, in anticipation of general buying on the part of the public, which has yet in a great measure to come. The dividends, however, are now approaching very near, and if they turn out as well as anticipated increased activity is tolerably certain, more especially as money for a time will probably continue comparatively cheap. Canadian stocks very quiet, but American ones have had a very sharp and strong rise, which, though not maintained fully, is yet expected in many instances to be considerably augmented. The outside foreign loans have been in strong demand, and Mexican, San Domingos, and other defaulting stocks are many points higher. Local stocks firm at following quotations:—Hull Bank, 12½;

London and Yorkshire Bank, 32s. 6d.; Yorkshire Bank, 22½; Hull Docks, 90; Earle's Shipbuilding, 20½ x.d.; Hull Trams, 9½; British Gas, 33.

## SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

**STIRLING.**—Mr. J. GRANT MACLEAN, sharebroker and ironbroker (Jan. 6) writes:—During the past week business, when not interrupted by holidays, has been pretty active. Trade is quiet, as is usual at this time of the year, but it is, undoubtedly, improving at home and abroad, and being in a sound condition while money is cheap and plentiful, presents a better prospect than for many years past.

In shares of coal, iron, and steel companies the movements for the week comprise advances of 1½ 15s. per share on Nant-y-Glo and Blaenau (pref.), 2s. 6d. on Ebbw Vale, 6s. on Glasgow Port Washington, 4s. on Marbella, 12s. 6d. on Bolekows, Vaughan, and Scottish Australian, and 6d. on Monkland; but Chillington Iron and Monkland (pref.) are each reduced 1s. 3d. per share, also Omoa and Cleland 1s. In the Scotch pig iron warrant market prices have advanced from 52s. 3d. to 54s. per share, which was in consequence of the annual returns showing a greatly increased output, with a decrease in the stocks. The demand is of a more general and satisfactory nature, and promises to increase over the production, particularly when the stocks in America are cleared off, the hopes of speculators are also encouraged by the demand or the miners in some parts for advanced wages. Benhar have long been steady between 8s. to 10s., and although it has been decided to wind up the company voluntarily there are still hopes of reconstruction. Interim dividends of 5 per cent. have been announced by John Brown and Company, and the Newport Abercrombie Coal Company. The Hamstead Coal Company has made a call of 1s. per share, payable January 25. Andrew Knowles and Son are at 13 discount. Ashton Vale, 5; Barrow Hematite, 137; Blisdon and Crump, 60s.; Bilbaw Iron, 23½; Bagworth Colliery, 67s. 6d.; Bolekows, Vaughan, 29½ to 29½; ditto (12s. paid), 97s. 6d. to 100s. prem.; ditto (pref.), 21; Cardiff and Swansea, 35s.; Carnforth, 107; Charles Cammell and Company, 8½ dis.; Chillington Iron, 78s. 9d.; Chapel House Colliery, 20s. to 30s.; Clyde Coal, 84s. to 87s.; Conselt Iron, 23; Darlington Iron, 14½ dis.; Ebbw Vale, 11 to 11½; Great Western Colliery, 11s. 6d.; Henry Briggs, A. 10 to 11½; John Bagnall and Sons, 27s. 6d.; John Brown and Co., 10½ dis.; Llynvi and Tondur, 9½ to 10; Lofthouse Colliery, 65s.; Marbella, 65s. to 88s.; Mersey Steel, 50s. dis.; Mwyndy Iron, 45s.; Monkland, 55s. to 57s.; ditto (pref.), 5½ to 6; Muntz's Metal, 13½; Nant-y-Glo and Blaenau (pref.), 39 to 39½; Newmarket Colliery, 5; Nerbudda Coal and Iron, 8s. 9d. to 11s. 3d.; North Lonsdale, 80; Oakham Colliery (pref.), 5s.; Omoa and Cleland, 35s. to 37s.; Parkgate Iron, 10s.; Pelsall Coal and Iron Company, 4½ dis.; Rhymney, 29½; Sandwell Park Colliery, 17; Sheepbridge Iron, 16½ dis.; Staveley, A. 15½ prem.; ditto, C. 79½; Steel Company of Scotland, 11½; South Wales Colliery, 45s.; Trestle Iron, 47s. 6d. to 50s.; Thorpe Gwaler Hall, 20s.; Tredegar, A. 12 dis.; ditto, B. 23; Ulverston Iron, 80s.; West Cumberland, 9½ dis.; Wigan and Whiston, 55; and Workington Iron, 14.

In shares of foreign copper and lead companies prices have advanced. Tharsis (New) have improved 1½ 5s. per share, Cape Copper 1½, Tharsis 17s. 6d., Huntington 65s., Panulillo 3s. 9d., and Canadian 1s. 6d. A favourable telegram has been received from the Canadian Copper Mine, giving a sample assay from the Francis Copper Mine. Tharsis have improved from 34½ to 35. Alamillos are at 35s.; Copiapu, 15½; English and Australian, 27s. 6d. to 32s. 6d.; Huntington, 65s. to 67s.; New Quebrada, 57½; Panulillo, 5½ to 6½; Pierrefitte, 22s. 6d.; Virnelberg, 30s. to 40s.; Yorke Peninsula, 5s. to 7s. 6d.

In shares of home mines prices have improved a little, and business is not very active, except in tin mines. Glasgow Caradons are 1s. higher on the old shares, and the new shares are also higher; the old shares touched 28s., and the new shares are 16s. to 18s. Killifreth are again thought a good speculation, as they are getting down to the point in the shallow part of the mine, where they expect a discovery. Bedford United are at 31s. 3d.; Berehaven, 2s. 6d.; Blaenau Caetan, 23s. 9d.; Blwch United, 25s. to 25s.; Carn Camborne, 55s. 3d.; Carn Brea, 120; Cook's Kitchen, 10½; Devon Consols, 16½; Dolcoath, 58½; Denbighshire Consols, 40s.; Devon United, 50s.; East Herodfoot, 7s. 6d.; East Wheal Caradon, 30s. to 40s.; East Long Rake, 22s. 6d.; East Wheal Lovell, 4 to 5; Grogwinion, 60s.; Great Laxey, 18½ to 19; Great Consols, 25s.; Hingston Down, 30s.; Indian Queen Consols, 30s. to 40s.; Killaloe Slates, 10s.; Killifreth, 3s. 9d. to 6s. 3d.; Lady Bertha, 20s.; Mining (of Ireland), 61s. 3d.; Mid-Devon Copper, 5s. 6d.; North D'Eresby, 25s.; North Molton, 10s.; North Busy, 44s.; Pant-y-Mwyn, 20s. to 20s.; Pandora, 12s. 6d. to 17s. 6d.; Prince Patrick, 27s. 6d.; Prince of Wales, 20s. to 22s. 6d.; Parka Mines, 30s. to 40s.; Roman Gravel, 10s.; South Frances, 12½; South Crebor, 82s. 6d.; Tamar, 20s. to 22s. 6d.; Tincroft, 20; Tretail, 20s.; West Seton, 19; West Peever, 17; West Basset, 10½; West Kitty, 27s. 6d. to 32s. 6d.; West Crebor, 8s. to 11s.; West Phoenix, 4s.; Wicklow, 9s.; Yatwith, 20s.; Wheal Crebor, 92s. 6d.; Wheal Coates, 25s.; Wheal Grenville, 11; Wheal Hony, 45s.; and Wheal Jane, 10s. to 15s.

In shares of gold and silver mines there is no particular alteration in prices. Richmonds have advanced to 15½, 17; this week's run being \$55,000. A meeting of the Cedar Creek Company is to be held on Jan. 26. Frontino and Bolivia has declared a dividend of 2s. per share, payable Jan. 12. Flavius unaltered. Almadens are at 7s. 6d. to 10s. Australian Mines, 5s.; Callao Bis, 20s. to 25s.; Don Pedro, 13s. 9d.; Eberhardt, 65s.; Emmas, 62s. 6d.; Exchequer, 6s. 3d.; Flagstaff, 25s.; Gold Coast, 7s. 6d. to 8s. 6d.; Indian Glenrock, 30s.; I.X.L., 10s.; Kapangas, 11s. 3d. to 12s. 6d.; La Plata, 40s.; Mysore, 20s.; Nava de Jadraque, 17s. 6d.; Nouveau Monde, 28s. 9d.; New Gold Runs, 6s. 3d.; Port Phillip, 11s. 3d.; Rosa Grande, 3s. to 5s.; Ruby, 65s.; South-East Wynad, 38s. 9d.; South Indian, 42s. 6d.; St. John del Rey, 240; Tecoma, 5s. to 10s.; and United Mexican, 50s.

In shares of oil companies Dalmenya have advanced 1s. per share owing to the declaration of a dividend at 15 per cent.; at the tenth annual meeting on Wednesday the profit was 6031½, which is subject to depreciation to be divided to reserve



account, and the sum of 30437. was carried to reserve, making it 44121. Young's paraffin are steady, about 12½.

In shares of Miscellaneous Companies there is no particular change to notice. Avonside Engine are at 55s.; Don'twicht Salt, 13s. 9d.; Earle's Shipbuilding, 14½ dis.; French Zoedone, 20s.; India Rubber, 17½ to 18; Milner's Safe, 9½ to 9¾; Palmer's Shipbuilding (B), 5½ dis.; and Zoedone, 35s. Prices of wagon companies' shares are:—Bristol, 60s. dis.; Bristol and South Wales, 6½; Birmingham, 13½; Gloucester, 87; Leicester, 45s.; Metropolitan, 65s. prem.; Midland, 9½; Railway Carriage, 80s.; Railway Rolling-Stock, 8; Swansea, 45s.; Western, 55s.; and United States Rolling-Stock, 19 to 19½. Chemical companies' shares are firm, owing to the continued, though perhaps slow, improvement in that trade. Gouss Manure are at 20s. 6d.; Longdales, 60s.; Lawes, 5½ to 5¾; and Newcastle, 55s. to 60s.

The Omoa and Cleland Coal and Iron Company have now sunk down on a fine seam of splint coal, and have announced that, as they possess a large plant in railway stocks, they can promptly supply the finest steam coal, as well as main, ell, and Virtuell coal, upon an extensive scale; also gas coal, shale, and ironstone. They also produce bricks, pipes, and fire-clay goods.

**EDINBURGH.**—Messrs. THOMAS MILLER and SONS, stock and share-brokers, Princes-street (Jan. 6) write:—The market for railway ordinary stocks has not varied much during the past week. Preference, guaranteed, and debenture stocks have maintained their high prices, and in some cases have risen still higher. American railways have been buoyant. Readings fell at one time, but have made a considerable rise on the issue of the new deferred income bonds. British Linen Bank has risen from 268 to 270; Commercial from 249 to 251; Royal from 204½ to 205. Insurance shares have been steady. In mining shares Canadian Copper have been very active, and the price has advanced from 39s. 6d. to 43s. Glasgow Caradon have risen from 24s. to 27s.; Huntington Copper from 68s. to 68½. Marbella Iron Ore rose at one time from 81s. to 91s., but the price has since receded to 87s. Tharsis have risen from 34½ to 35½. Benhar have receded from 9s. to 8s. 6d.

#### IRISH MINING AND MISCELLANEOUS COMPANIES' SHARE MARKET.

**DUBLIN, JAN. 6.**—The amount of business done in mining companies' shares has been greater than for some weeks past, and prices have been decidedly better. Berehaven shares have been largely dealt in at 4s. 3d., and there have been several transactions in Mining Company of Ireland between 3l. and 3l. 5s. Tramway shares continue dull, and the same may be said of most gas shares; but railways are more in request. The general prospects for the New Year are considered good.

**CORK.**—Messrs. J. H. CARROLL and SONS, stock and sharebrokers, South Mall (Jan. 5), write:—Markets have been steady for past week, but business is very limited. Great Southern were done at 11½ to-day and Midlands at 90½. Bandons are 91½ and Limericks 38½. No change in Passages or Macrooms. National Banks are strong at 66½, an Munsters at 67½ to 7. Hibernians remain 43½. Cork Steam Packets are 13½ to 13¾ ex div., Lyons at 5½, and Dalys 3 to 3½. Gas shares sellers at 7½ and Levys at 6. Gouldings remain at 9½, and Harbour Board Debentures at 102½.

### Meetings of Public Companies.

#### COLONIAL BANK.

The half-yearly general meeting of shareholders was held at the offices, Bishopsgate-street, on Thursday.

Mr. THOMAS DANIEL HILL in the chair.

Mr. JAMES CLARK (the secretary) read the notice convening the meeting, and the subjoined report of the directors was submitted:—The directors now submit to the proprietors the statement of the debts and assets of the corporation on June 30 last, which shows the net profit on the half-year then ending, as follows:—

DEBTS.	
Circulation .....	£ 468,287 16 8
Deposits, bills payable, and other liabilities .....	3,146,203 1 8
Paid up capital .....	600,000 0 0
Reserved fund .....	100,000 0 0
Balance of profit from last half-year .....	1,401 4 7
Net profit for the half-year .....	42,978 11 7
Total .....	£4,358,870 14 6

ASSETS.	
Specie .....	£ 288,412 0 2
Due to the bank in the colonies on bills discounted and purchased (including those past due), &c. ....	1,335,242 16 11
Due to the bank in the colonies on current accounts .....	21,354 0 5
Due to the bank in London on bills remitted, cash at bankers, &c. ....	2,703,861 17 0
Bank premises and furniture in London and in the colonies .....	10,000 0 0
Total .....	£4,358,870 14 6

It will be seen by the above statement that the net profit exhibits some increase over that of several previous half-yearly periods, and the directors have, therefore, the pleasure to recommend that out of the net profit amounting, after providing for all bad and doubtful debts and for income tax, to £42,978 11 7, added to the amount brought forward, £1,401 4 7

Together .....

An ordinary dividend of 6 per cent., and an extraordinary dividend of 1 per cent., together, 7 per cent., be made for the half-year ending June 30 last, upon the paid-up capital of the corporation, which will absorb 42,000 0 0

And leave .....

To be carried forward to the next half-year.

The hurricane which passed over a portion of the island of Jamaica on August 18 last, caused considerable injury to the growing crops of fruits and vegetables, and also to the sugar plantations of the district; but it is not expected that any serious loss will fall on the Bank by that lamentable event. With that exception, the prospects of the crops generally are favorable for the present year.

The CHAIRMAN said: Gentlemen, as you may suppose, I have much pleasure in moving the adoption of this satisfactory report. I am happy to tell you that the accounts from the branches for the last six months are on the whole favourable. I cannot say that the trade in the West Indies has become brisk, or that more confidence has revived in sugar, the main staple of the West Indies. It is quite clear that there will be no real security for sugar planters until foreign export bounties are removed, or a countervailing duty imposed. This is the 9th year in which the prejudicial effect of these bounties has been mentioned from this chair, and I trust it will be the last, for the depressed condition of sugar plantations and their low value causes increased risk in banking throughout the West Indies. I have much pleasure in moving that the report which has been read to the meeting be received, printed, and distributed amongst the proprietors. If any gentleman has any question to ask I shall be happy to give an explanation after the report has been seconded.

—Mr. HENRIQUES seconded the motion.

A SHAREHOLDER asked whether there was any better tone in regard to the sugar bounties? There seemed to be some little excitement about the question in the papers. He asked whether it was for good or evil, if the Chairman could tell them anything about the question, and whether they were likely to benefit by it?

The CHAIRMAN: The Select Committee have recommended very strongly that the Government should move in the matter, and press foreign Governments to a sugar conference, in order to do away with bounties, and they have also urged that if foreign countries will not do away with bounties a countervailing duty ought to be imposed. We are waiting anxiously to know what foreign Governments are inclined to do. I understand that negotiations are opened up, but no answer has been received yet from the foreign Governments.

The CHAIRMAN, in reply to a question, said there were some bills always that were not paid at maturity, but they were of very small amount. There was a very large amount due to the Bank in London. He wished there was more in the colonies, as it would give a better rate of interest.

The motion for the adoption of the report was then put, and carried unanimously.

On the motion of the CHAIRMAN, seconded by Mr. HENRIQUES, a dividend of 6 per cent. was declared, and an extraordinary dividend of 1 per cent. for the half-year ended June 30, 1880, on the paid-up capital of the corporation, payable on and after the 8th inst., free of income tax.

The retiring directors and auditor were re-elected.

Mr. CASTLE SMITH moved a vote of thanks to the Chairman and directors for the way in which they had conducted the affairs of the bank. He said they had gone through trials of all kinds in years that had passed, and had now worked the Bank round up to a state almost bordering on prosperity; therefore he thought there was ample margin for giving them their best thanks, and requesting the directors to continue their exertions on their behalf.

The motion was seconded, and carried unanimously.

# The Needlerock Estate and Gold Mining Company, Limited.

CAPITAL £125,000, IN 125,000 SHARES OF £1 EACH,

Of which 32,000 Shares are reserved as part payment to the vendor. 35,000 Shares have already been applied for, and will be allotted in full at par, and the balance of 58,000 Shares is now offered for subscription at par.

PAYMENT AS FOLLOWS:—2s. 6d. on application; 2s. 6d. on allotment; 15s. two months after allotment.

#### DIRECTORS.

ARTHUR HALL, Esq., 35, Craven Hill Gardens, Hyde Park (Vice-Chairman of the South-East Wynaad Estates and Gold Mining Company (Limited)).

W. ARTHUR HICKS, Esq., 6, Stanhope Terrace, Hyde Park.

KENNETT KINGSFORD, Esq., J.P., Sandgate, Kent.

(And one Director to be elected by the Shareholders at their First Meeting.)

BANKERS—In London: Messrs. MARTIN and CO., Lombard Street, E.C.

In India: The AGRA BANK (Limited).

SOLICITORS—Messrs. NEWMAN, STRETTON, and HILLIARD, 75 and 76, Cornhill, E.C.

AUDITORS—To be elected by the Shareholders.

BROKERS—Messrs. HARKER and HANCOCK, 8, Warrford Court, Throgmorton Street, London, E.C.

SECRETARY—J. S. TROTTER, Esq.

#### TEMPORARY OFFICES.

THE OFFICES OF THE SOUTH-EAST WYNAAD ESTATES AND GOLD MINING COMPANY (LIMITED),  
No. 1, QUEEN VICTORIA STREET, E.C.

#### ABRIDGED PROSPECTUS.

This company is formed to acquire and work two reefs known as "Buckingham" and "Stone's," with about 250 acres of land, being part of the Needlerock Estate held on lease by the South-East Wynaad Estates and Gold Mining Company (Limited).

The Needlerock Estate is situated in the Devala Group, and has been most favourably mentioned by Mr. Brough Smyth in his report, as follows:—

"There are five separate outcrops of quartz at Needlerock, the most important of which is the Buckingham Reef, extending from the north-western angle of the estate south-eastwards for 36 chains or more. The Buckingham Reef may be a continuation of the Monarch Reef, and that which is found at the Dingley Dell Bungalow."

Mr. Oliver Pegler reported as follows:—"On the Needlerock Estate, at the point near the boundary separating the two properties, we were successful in meeting with some rich quartz, in thin leaders, running through gneiss rock. Some of the specimens obtained were very rich. No doubt these veins strike from a strong reef, which outcrops close at hand. There is here a great extent of old workings, both quartz mining and alluvial washings."

Captain Roberts, at present in charge of the mining works at this point, reports to the Manager, under date 16th October, that the samples of stone tried during the week averaged ½ to ¾ an ounce of gold per ton, and that in some of them large quantities of native silver, in the proportion of from 50 to 100 ounces per ton, had been also discovered.

A full supply of timber and water is available for working these two reefs, and there can be no doubt of the fact that they contain a vast amount of gold, and the above report fully endorses Mr. Oliver Pegler's early formed opinion that this quartz was as rich as any yet found in the South-East Wynaad.

The following is the assay of quartz by Messrs. Johnson, Matthey, and Co.'s certificate, dated 13th November, 1880:—Country Rock, adjacent to Stone's Reef—Needlerock, 0.950 ozs. = 19 dwts. per ton of 20 cwt. of quartz. From Messrs. Johnson, Matthey, and Co.'s certificate, dated 20th October, 1880:—Needlerock, small leader, 60.200 ozs. = 60 ozs. 4 dwts. per ton of 20 cwt. of quartz.

A good road has been cut under the superintendence of Mr. Oliver Pegler, three miles long, between this estate and the neighbouring

property "Bolingbroke," so that there is now easy access to Devala and to the Government roads therefrom.

The portion of Needlerock acquired by this company abounds with timber. The upper part of a perennial stream also flows through the estate, and ultimately joins the Pandi river, into which the Devala stream flows. Facilities for storing surplus water abound, and a further advantage is that mining operations can be carried on at a much less cost, owing to the reefs being accessible by adits, the sinking of shafts being thus to a great extent avoided.

This company has secured both the surface and mining rights, which is a very important point, and these reefs can be at once worked without further prospecting. The perfect freedom to build stores, houses, and put up machinery, besides having spots for the deposit of the debris of the workings, are great advantages.

The gold fields have now been more or less tested throughout the Wynaad District, and if the cost of extraction and working be anything like the figure put down by Mr. Pegler and Mr. Brough Smyth, a low estimate of even 5 dwts. of gold per ton of quartz would give an excellent return on the capital.

The vendor is the promoter of the company by whom the purchase money has been fixed at £53,000 in cash and £32,000 fully paid £1 shares. The vendor undertakes to defray all the expenses incidental to the formation of the company (except the legal charges attaching to the prospectus, articles of association, and the agreement for purchase by the company), leaving the remainder of the capital (£40,000) entirely available for the development of the works.

The only contracts which have been entered into are, one dated 24th December, 1880, made between the South-East Wynaad Estates and Gold Mining Company (Limited) of the one part, and John Norman Crosse of the other part, and one dated 30th December, 1880, made between the said John Norman Crosse of the one part, and the company of the other part.

These agreements, together with the memorandum and articles of association, and translations of the leases, under which the Needlerock Estate is held, can be seen at the offices of the company's solicitors.

Full Prospectuses and Forms of Application for Shares can be obtained at the Offices of the Company, or from the Bankers or Brokers. Should no Allotment be made, the amount paid on application will be returned in full.

The CHAIRMAN: Gentlemen, on behalf of myself and my co-directors, I beg to thank you for the manner in which you have received the speech of Mr. Castle Smith, and assure you our best endeavours are always exerted on behalf of the shareholders.

The proceedings then closed.

#### THE LOVELL TIN MINE.

A general meeting of shareholders was held at the company's offices, on Wednesday, Mr. WM. BLACKETT in the chair. The statement of accounts for 24 weeks ending Nov. 6 showed a loss of 489l. 6s. 5d.

Mr. BIDDER stated that the accounts were *bona fide*, and that the tin on the mine would realise more than the amount credited, the manager, Capt. Prisk, being instructed to never over-estimate gentlemen would see by referring to accounts that at the previous meeting the tin then credited realised 76l. 11s. more, and he believed what was credited on this occasion at 55l. would fetch 56l. to 57l., and that the weight would also prove more than credited.

The accounts were then received and passed.

The agent's report was as follows:—

Jan. 4.—The following is a report of all operations carried on in the mine for the last 24 weeks. The 38 has been driven east of Hownan shaft 7 fms., and the greater part of the drive has been through a large tin-producing lode, varying in width from 5 to 8 ft.; the lode in the present end is 4½ ft. wide, producing a little tin, but not to value; this end is now over 40 fms. east of shaft, and from present appearances will shortly improve, and I hope be a paying lode; driving by six men at 16l. per fathom. The cross-cut north at this level has been driven 6 fms. and suspended. Nothing of any value been met with. The lode in No. 1 stope in back of the 38 is 7 ft. wide, worth 12l. per fathom; working by four men, at 7s. per ton of stuff. The lode in No. 2 stope in back of said level is 9 ft. wide, worth 15l. per fathom; working by four men, at 7s. per ton of stuff, and they pay for rising; this point is greatly improved in the last two months, and I am pleased to say we are in a position to send to surface a much larger quantity of stuff from here as the lode is holding up much better than we expected. The new sump winze has been sunk below the 38 over 3 fms. through a lode averaging 8 ft. wide, which has produced some rich tinstuff in the last month; the lode here had been slightly disordered by granite appearing from the north side, but I am pleased to report the lode in the very bottom of winze is 9 ft. wide, worth 15l. per fathom, and the prospects for a continuance in depth were never so good as at the present time.

I beg to call your attention to a plan, where you will observe a line drawn across the lode in the winze, which represents a small cross course, composed of quartz. The influence from this has been the means of carrying the lode down strong and masterly below the level; and the prospect for opening a profitable mine in depth is now really good. I may also add that all the rich courses of ore discovered in the adjoining mines—viz., East Lovell, Old Wheel Lovell, and Trumpet Consols—has been found near such cross-courses as above referred to; and I hope no shareholder will part with any shares until this point is seen at least 10 fms. deeper, as I have every confidence that a good mine will be found in this direction. Nine men are working here at 20l. per fathom; winze to be carried 12 ft. long.—North lode: This lode has been discovered in the last four weeks by coasting, and a shaft sunk on its course 3 fms. below surface. At this small depth it contains saving work for tin. The lode is 2 ft. wide, embedded in soft congealed granite. My opinion is that by going a little deeper we shall open up profitable ground with small expense. This is working by two men for one month at 20s. per fathom. For three months, or over, after your last meeting, we had little or no water for stamping, and more than one-half of the staff of underground men were employed on dead work—viz., driving the cross-cut north, and cutting through the granite in the 88. The latter has given us greater facilities for the development of the mine, and to a great extent accounts for the small sales of tin. Number of hands employed are—tutwork, 30 men; landing and filling, two; spalling, two; smith, one; stamps, one man, six boys, and two girls; total, 44.—J. PRISK.

The plans of the workings made up to the date of the report, and received by the secretary that day, were laid upon the table.

Mr. BIDDER, who had visited the mine himself and inspected the underground workings on three or four occasions, the last time being about eight or ten weeks since, explained from the plan the points of operation, and showed where the recent discovery had been made, which bids fair to bring the mine once more into a profitable state. This referred to the new sump winze in the bottom of the 38 fm. level.

The report being considered very favourable was passed.

A call of 4s. was made, payable in two instalments of 2s. each, the first 2s. on

or by Jan. 26, and the balance on Feb. 26, and the usual discount of 5 per cent. to be allowed on all prompt payments.

A vote of thanks was unanimously passed to Mr. Bidder for the trouble he took in explaining by the plans and sections the operations at the mine.

A vote of thanks to the Chairman (one of the oldest shareholders in the concern, and a member of the committee of management) concluded the business of the meeting.

**COPIAPO.**—At a special meeting on Monday (Mr. J. D. Fletcher in the chair) the resolution passed at the meeting of shareholders on Dec. 13, "That the company may, in the manner required by the Companies' Acts, 1862 to 1880, by sub-division of its existing shares, divide its capital into shares of a smaller amount than the amount of 20l. each, fixed by the present constitution," was unanimously confirmed, and it was resolved that a special meeting should be called for the purpose of dividing the existing 20l. shares into shares of 4l. each. The Chairman stated that the profit for four months—July, August, September, and October (the latter month being the latest date to which advices have been received from the mine)—amounted to 6000l., which would admit of the payment of a dividend of 10s. per share in the course of the ensuing month; but the feeling of the meeting was in favour of a dividend of 7s. 6d., as being more likely to be more permanent and regularly paid every three months. The synopsis of the operations at the company's mines during October—Estimated value of Dulcinea and Checo, October production, \$24,550; less expenditure, \$12,075; total profit, \$12,475.

[For remainder of Meetings see this day's Supplement.]

**THE ELECTRIC LIGHT IN GLASGOW.**—The Brockie electric lamps, supplied with electricity from Gramme machines, worked by an Otto gas engine, have been introduced at the new *Herald* buildings in Glasgow, Messrs. Anderson and Munro being the electric engineers employed. The public offices and composing rooms are forthwith to be illuminated by the same means.

**THE DYNAMITE MONOPOLY.**—The attempted prolongation of the dynamite patent continues to receive the earnest attention of miners, who will be gratified to learn that energy on their part and the employment of good counsel (for which, of course, funds should be at once subscribed) are considered all that is necessary to prevent a continuance of the exactions they have had to submit to. With regard, says Iron of to-day, to the question of profit, it can be shown—and we are informed that it undoubtedly can—that excellent profits have been realised, and that one-half the capital was repaid in 1877, we do not see what possible chance there is of the dynamite patent being prolonged. On the other hand, the very fact of large profits having been made implies that the mining interest has been well taxed in this respect during the existence of the patent, and the knowledge of this should serve as an incentive for releasing them therefrom. To put the matter plainly, and, we think, fairly, there is no reason whatever why the term of the dynamite patent should be prolonged. It has without doubt paid its proprietors well, if not handsomely, and it has for 14 years given them a monopoly which should now, in justice to the public, cease. The validity of the patent has been severely contested at law, its proprietors having in 1877 instituted proceedings against Messrs. Krebs and Co., the manufacturers of lithofracteur, which is another compound of the nitro-glycerine class, but differing widely both in its constitution and its results from dynamite. In the first instance Mr. Justice Fry, who in the early stage of the hearing went against the plaintiffs, held that the defendants had to some extent made use of the invention. On appeal, the Master of the Rolls, Lord Justice James, and the late Lord Justice Thesiger, three leading authorities upon the subject of patent law, unanimously reversed the decision of the Court below, and held that the instructions in the specification were insufficient and the claim too wide. Ultimately, however, the House of Lords restored Mr. Justice Fry's judgment, thus closing the door of hope that had been opened to the public, who otherwise would have been benefited by being able to obtain a cheaper, and in some respects a better, explosive compound.

As the matter at present stands the dynamite patent presents a bar to all progress as regards the development of explosives containing nitro-glycerine, for it gives its owners the exclusive control over all such. Notwithstanding that there are, as we have stated, several compounds of this class which are only awaiting "a fair field and no favour" to make their way on their own merits and at a reasonable price, and notwithstanding that inventors may have succeeded in producing a superior explosive to those already known, nothing at present remains but to use dynamite, with its attendant physical disadvantages and costliness.



ness. By the removal of this monopoly no injustice will be done to the proprietors of the dynamite patent, inasmuch as they will still be able to make a fair profit on their manufacture. On the other hand, a decided act of justice will be done to the users of explosives of this class, who will not only, by reason of a wholesome competition, be enabled to obtain dynamite at a greatly reduced price, but will also have the choice of other compounds, which, in some respects, are better suited to their requirements, whilst their cost will be, in proportion, no greater, but, estimated by the work done, perhaps less.

#### WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,  
NEOWNERS, STOCK AND SHARE DEALERS, &c  
1, ST MICHAEL'S ALLEY, CORNHILL, LONDON.

A member of the House of Keys in the Isle of Man has forwarded us a copy of the new Rating Act of 1881, which has been read a second time and passed. Its main object, so far as we can gather from a cursory view, is to make Crown property, when in the hands of a subject, pay its proportion of local burdens. Thus, clause 8 says—"Where property of the Crown of any description, which, if the same belonged to a subject, would be liable to be valued and rated for the payment of local rates, is in the occupation of a subject, such property whilst in such occupation shall be liable to be valued and rated for the payment of local rates, and such rates shall be payable by the occupier of such property as a charge in respect of his occupation only." Clause 5 states that any tenant of a mine may (unless he has specifically contracted to pay such rate) deduct from any rent or dues payable by him one-half of any such rate paid by him.

Thus the rates are to be levied on the rent or dues, the same as the poor-rate is levied on mines in England (where the lessee pays all), but in the Isle of Man, except in the case of specific contracts to the contrary, half is to be paid by the mines and half by the Crown. Now in the lease of Great Laxey there is a clause on the part of the Crown that the mine shall pay "all present local taxes or any new or future taxes that may be levied locally."

Thus the Act falls heavily, and we think unfairly, on Great Laxey; but the fault lies with the Crown, so far at least as we are able to judge at present.

The chief rates of the Isle of Man are—Asylum rate, 5d. in the pound; Education rate, 3d.; Highway, 3d. in the pound. From all of which the Crown property is exempt; and the last clause of the Act under review says—"Nothing in this Act contained shall be construed to make property of the Crown not in the occupation of a subject liable to the payment of local rates, nor otherwise to apply to or affect any rights of Her Majesty, her heirs, or successors."

The insertion of such a clause as we have quoted, in the Great Laxey lease, would almost indicate that the Crown had some notion that one day or other some such scheme as that now proposed might come into operation; and considering the dues imposed by the same lease of 1-8th, we do not wonder that the directors and shareholders are bestirring themselves, and the Crown should at once, at the very least, place them upon the same footing as other mines in the Isle.

We have heard it said that this bill, which throws such burdens on the mining interest, has been "smuggled" through the House of Keys; and it looks very much like it unless (and the idea suggests itself from the seeming inconsistency of two of its clauses) some arrangement had been come to beforehand between the House and the Crown. No. 9 protects the property of the Crown not in the occupation of a subject from all rates. No. 5 makes the Crown, as we read it, liable to half the rates on property in the occupation of a subject.

"Options" are common both in the stock and mining markets, and we don't see how we can better explain them than by *supposing* a few cases. For instance, A has an idea that shares in Wheal Beare are too high, and that the price will be much lower a few months hence. B thinks differently, so A gives him, say, 1s. per share, or 5l. down, for the "put" of 100 shares at 1l. each three months on. If the shares during that time go below 19s. A buys them and delivers them to B at 1l. when the time arrives. If they don't move, or go up, A loses his 5l. and B gains it; and even if the shares are put upon B, they would, with the 1s. in hand only cost him 19s. This is called the "put" option. Oh the other hand, B may think shares in Wheal Bullem must have a rise in a few weeks, and A thinks they will fall. So that B gives A 1s. per share for the call for 100 shares at 1l. per share; and if they don't rise B loses his 5l. and A gains it. A large amount of this sort of business was done in Wheal Crebor when the mine first cut rich, and so many opinions were expressed about it. And we believe one or two persons had the "call" of shares at 1l. 10s. when they had reached 12l. per share. The joint "put and call" is another option, and a more expensive one, inasmuch as the payee has the right either to put or to call shares at the fixed price.

The winze sinking below the No. 2 level at Aberllyn is worth 4 tons of blende per fathom.

The opinion expressed on the dynamite question by Mr. Pendarves Vivian, M.P., at the Penzance meeting agrees with the one object of our remarks last week—that is, to hear both sides of a question before rushing to conclusions. "The miners," Mr. Vivian states, "should take every means to ascertain the truth of the matter, and oppose the application for the patent if they find that the company's charges in this country are excessive in order to pay very high dividends to their shareholders." In this we cordially concur.

From Mr. JOHN B. REYNOLDS:—The markets have been restless. The Irish difficulty has been made use of by those who wish to check the upward movement. We have had the Irish difficulty before, and it will be difficult to get up a panic over the present one. The probability is that the crisis will be triumphed over by justice and good will. We may be sanguine, but all will unite in the hope that we are correct. Perhaps there never was a time in the history of this country when commercial matters were more promising than now. The new fields of industry being opened up by civilisation and enterprise must cause great expansion in trade. To some it is a matter of surprise that the metal markets are so good, but to us there appears no reason why tin should not be at 100l. per ton before Midsummer. The quotations during the week have from day to day been so far satisfactory as to indicate a further and substantial rise. It is reported that a quantity is being kept back; this fact simply confirms the conclusions to which we have arrived. The managers of our largest tin-producing companies are in no haste to send their produce for sale, and there can be no doubt that the mines which keep the most tin in reserve will be the foremost to reward the shareholders hereafter. We wish there was not a shadow resting on the mining market, but, unfortunately, there is a cloud gathering. It is well that I do not refer to Cornish mines. Certain irregularities on the part of promoters of certain gold mines threaten unfortunate results. It is a pity that gentlemen should be connected with concerns over the management of which they cannot have the slightest control. We would not be parties to the contraction of legitimate enterprise in any direction, and these remarks are only made for the purpose of contracting enterprise which is not legitimate. A word to the wise is sufficient. The foolish will listen the stable-door after the horse has bolted. As we have often reminded our readers, it is the habit of many people to make strict enquiry after they have parted with their money. To have done so before would have benefited them.

MADRAS GOLD MINING COMPANY.—It is understood that in the course of next week the prospectus of a new undertaking under this title will be issued of acknowledged value, and officiated at home and abroad by gentlemen whose names will carry great weight. One of them is Lieut.-Col. William Arbuthnot, whose admirable speech and subsequent replies to questions at the late Ooregum meeting were so greatly appreciated, and displayed such a perfect acquaintance with the subject. The property has been favourably reported upon by gentlemen who have made it the subject of a special inspection, and it is not doubted that when it comes to be known and the statements made regarding it are weighed the Madras Gold Company will take a front rank amongst those Indian gold investments which are now so popular on the English Stock Exchange. It is understood that a large number of the shares are already taken up.

HOLLOWAY'S PILLS.—In general debility, mental depression, and nervous irritability there is no medicine which operates so like a charm as these famous Pills. They purify the blood, soothe and strengthen the nerves and system, give tone to the stomach, elevate the spirits, and, in fact, make the patient sensible of a total and most delightful revolution in the whole system. They may be commended most unreservedly as the very best family medicine in existence. Though so powerfully efficacious, they are singularly mild in their operation, and might be given with perfect confidence to delicate women and young children. They contain not a grain of mercury, or any other noxious substance, and cannot do harm. Delicate females and all persons of sedentary habits will find these Pills a blessing.

### A FURTHER ADVANCE IN TIN.

## THE GREAT CONSOLS MINING COMPANY

(LIMITED)

Is duly Incorporated with Limited Liability.

CAPITAL £25,000, IN SHARES OF £1 EACH,  
payable 5s. per Share on application,  
and 15s. per Share on allotment.

NO FURTHER LIABILITY.

BANKERS.

THE ALLIANCE BANK (LIMITED).

The Company has been formed to work an extensive and valuable Tin Mining property in one of the best districts in Cornwall. It adjoins Great Hewas, and is surrounded by others equally famous, including Great Polgooth, Great Dowgas, South Polgooth, and St. Austell Consols, which, it is stated, have yielded over £4,000,000 worth of mineral.

The Prospectus will appear next week, meanwhile particulars and Forms of Application may be obtained from the Brokers,

MESSRS. BLYTH AND HUTCHINSON,  
79, Cornhill, E.C.,

or the Secretary,

MR. J. K. LAMB,  
33, New Broad Street,  
London, E.C.

### FREEHOLD MINE.

For full information of the DISCOVERY

at

### LAS CALDAS

of RICH CARBONATE OF COPPER,  
yielding on assay made by Messrs. JOHNSON,  
MATTHEY, AND Co.,

47 Per Cent.,

and valued at the present low price of Metal

at

£22 PER TON OF ORE,

apply to—

MESSRS. WARD AND CO.,

Mine Owners and Share Dealers,

184, PALMERSTON BUILDINGS,

Old Broad Street, London.

ESTABLISHED 1864.

Business in any number of Shares at  
22s. 6d. to 25s., present price. Must go  
by "leaps and bounds" to £5 each, so  
should be bought at once.

The Shares are £1 each, and no further  
liability, with ample capital reserved for  
working the Mine.

Published this day, post free 1½ stamps.

"SOW AND REAP."—A Reliable Guide for Investors.—  
Contains interesting Articles on the GOLD FIELDS OF INDIA and  
CORNISH MINING. Every Investor should take it.  
Published by THOMPSON and SON, 14, Old Town Street, Plymouth.

GOLD IN CORNWALL.—  
Gold in unmistakable quantities has been found in FORTESCUE (STANNAGWYN) MINE, near ST. STEPHEN'S, and which is likely to have a marked influence on the value of the shares. They now stand at only £2, but must advance in value.  
Full particulars from THOMPSON and SON, Secretaries, 14, Old Town Street, Plymouth.

#### THE VAN MINES—MONTHLY REPORT.

Jan. 6.—As under please find my monthly report and setting list:—The 120 fm. level West: I am glad to inform you that in this end we are driving still in a good lode for lead, worth at present about 2 tons per cubic fathom. The issue of gas from the forebreast in large quantities leads us to look for further improvement. The winze from the 105 was communicated with this end last evening, consequently we shall now—having secured ample ventilation—set the winze-men to cross-cut in order to prove the width and value of the lode at the 120, and in doing so will probably get hold of the ore ground seen crossing the winze in the first few fathoms of sinking. We shall resume the driving of the 105 west in a few days, and we hope to get hold of the ore ground seen in the 90 in advance of this end. At present the men are engaged taking down the lode in the side and back of the 105 in the neighbourhood of the 150 winze, where it is worth 18 cwt. per cubic fathom. During the past month we crossed north 16 ft. in the 90 west end, but found the lode poor, with the exception of the first few feet, which was fairly mixed with lead ore. We have now resumed the driving of this level. The 75 permanent level is driven far enough west to clear the stopes, so that we shall now commence crossing north for communication with the western level.—Stopes: The only change to report in the stopes are the following:—The stopes in the back of the 105 west, in the 60 fm. section, are 3 ft. wider, average yield about the same as before—35 cwt. per fathom. The 140 stopes in back of the 90 west is lengthened 9 ft. A slight falling off in produce in the 50 stopes east in the back of the 90 and the stopes in the back of the 20 east to the extent of about 3 cwt. per fathom.—Edwards' Shaft: We have been ready for some time to resume the deepening of this shaft, but more important work has necessitated my keeping the men employed in other parts of the mine.

North Lode: I am not yet able to report satisfactory results from our operations here. We have crossed far enough to reach the lode (61 fms.), unless that between East Van and Van it makes a bend northwards. This is quite possible; for instance, Van itself, had Van lode kept a straight course from Penelwyn eastwards, the parties who some 30 years ago made the first trials, would undoubtedly have become the lucky possessors of the enormous riches since discovered, and secured by the present proprietors. I have, therefore, no hesitation in recommending the continuance of the north lode cross-cut.

Surface: In the course of the past month we have thoroughly repaired No. 2 dressing machine, re-roofed the miners' dry-house (which was destroyed by fire), and repaired three of the crushing-mills. We have also taken advantage of the Christmas holiday to pack and examine the pistons of the large engines, which, I am pleased to say, we found in good order. Our four-weekly sale is 200 tons lead and 100 tons blende.

Settings for the ensuing two months:—The 120 west, to six men, at 120s. per fathom. Crossing to prove the lode in the 120 west from the bottom of the winze, to six men, at 140s. per fathom. The two stopes in the back of the 105 west, to eight men in each, at 50s. and 52s. 6d. per fathom respectively. The stripping of the lode in the side and back of the same level, near the 150 winze, to four men, at 55s. per fathom. The driving of the 90 west, to four men, at 70s. per fathom. Stopes in the back of the 90 as under:—The 50 east, to six men, at 60s. per fathom. The 20 west, to eight men, at 42s. 6d. per fathom. The 40 west, to eight men, at 70s. per fathom. The 60 west, to eight men, at 77s. 6d. per fathom. The 80 west, to eight men, at 60s. per fathom. The 140, to eight men, at 47s. 6d. per fathom. The 75 fm. permanent level, to four men, at 105s. per fathom. Stopes in the back of the 75 as under:—The 20 east, to eight men, at 60s. per fathom. The 20 west, to eight men, at 50s. per fathom. The 40 west, to eight men, at 47s. per fathom. The 60 west, to eight men, at 47s. 6d. per fathom. The 80 west, to eight men, at 47s. per fathom. The 100 west, to eight men, at 47s. 6d. per fathom. The 150 west, to eight men, at 70s. per fathom. The stopes in the back of the 45 west is set to eight men, at 80s. per fathom. The stopes in the back of the 30 fm. level east, to six men, at 62s. 6d. per fathom. The cross-cut for the north lode, to four men, at 120s. per fathom.—W. H. WILLIAMS.

DEVON FRIENDSHIP.—Since the announcement that the list would be closed on Jan. 13 we understand that a great impetus has been given to the subscriptions for shares, and that during the past week a large addition has been made to the number applied for. The more the property is examined the greater its importance and value appears, and we do not remember such an opportunity being ever before given to the public of making an investment so likely to be unusually successful at an early date, and ultimately be a greatly profitable concern. Indeed, considering the profits now being made, and which will be considerably increased as the levels below the adit are drained of water, the first twelve months will almost certainly see a good dividend earned. Enormous profits have been the result of the past, and these can be exceeded in the future, with the aid of much lower royalty, cheaper labour, and boring machinery. Next Thursday is the last day for receiving applications.

PRINCE OF WALES SLATE QUARRY.—The company owning this quarry, which is situated in Carnarvonshire, about 11 miles from Portmadoc, is about to be reconstructed. The present issued share capital is 37,830l., in 7566 shares of 5l. each, fully paid, and for each existing share a new 5l. share credited with 3l. paid up will be given to the present shareholders, the remaining 2l. per share being called up as required. The capital thus raised will be applied, after discharging the unsecured debts, in completing the development of the quarry so as to bring it into a profitable condition. The quarry is already opened into seven galleries, and one of the veins is estimated to contain 15,000,000 tons of slate rock, which, taking a yield of only 5 per cent. of dressed rock, with an output of 10,000 tons of slates and slabs per annum, would last for 75 years. The rent and royalties have been redeemed for 7000l., and a narrow gauge line of railway has been constructed under a special Act of Parliament from the quarry to Portmadoc.

NORTH BUSY.—The tin ground discovered by the former company is nearly worked out, there being about from 25 to 30 fms. of ground more standing above the 10 fm. level, that will about pay the cost of stopping. The shoot of tin was about 25 fms. long in the bottom of the adit, and they have driven under this at the 10 fm. level about 21 fms. without finding anything of a paying character, while the lode is said to have already passed through the shaft without developing the improvement anticipated. Better times, are, however, hoped for.

WHEAL COATES UNITED.—The expectation held out of a richer lode as depth is attained is being realised: as well also as the great improvement in the quality and richness of the lode as the great cross-course is approached west, which has enriched each of the eastern mines as it has come in contact with the lodes of these mines. Although some little more time has been expended upon extra work than was anticipated, the coming spring is likely to satisfy, in the shape of profits, all those who have been a little anxious during the delay.

GOLD IN CORNWALL.—FORTESCUE (STANNAGWYN) MINE.—Last week the presence of gold in unmistakable quantities was reported in the lode in the engine shaft (north and south). A few ounces of lode stuff were only tried for gold, but the result has been so satisfactory that large samples have been sent to London to be tested. It was stated a few weeks ago in Truro that large quantities of gold were found in this mine, and that Sir J. Hawkins made a large sum of money from the sale of gold. A man now residing in Ryder-street, Truro, who worked in the mine years ago, says he found gold discernible to the naked eye, and the men were in the habit of taking with them quills to collect the solid grains of gold often found in the mine. This statement led a well-known miner in Redruth and the manager of the gold mines near Dolgelly in Wales to visit the mine in search of gold, and gold has been found in the lode. A very few weeks will determine whether this mine is not as rich for gold as any of the vaunted Indian gold mines, irrespective of silver and the baser metals. The discovery will certainly enhance the value of the shares.

BEDFORD UNITED.—Sinking by the side of the lode in the new shaft is progressing satisfactorily, and early next week the lode will be taken down, when a good improvement is expected.

LEAD (Newcastle-on-Tyne, Jan. 4).—This market opened flat, and with little or no enquiry, and the only sale reported is 320 tons of rich lead, at 15l. 2s. 6d.; this is a fall of 2s. 6d. a ton on the last sale. Further sales are reported to-day (Wednesday); 100 tons of Spanish lead, at 14l. 17s. 6d.; 600 tons of Greek lead at 14l. 17s. 6d.

LEAD ORES.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Dec. 31	Mynydd Gorddu	15	£13 2 6	E. C. Goodhart.
	Pierrefitte	50	12 13 6	Parnell and Hall.
	Powell	25	9 8 6	Walker, Parker, & Co.
Jan. 4	New Broadford	20	11 13 0	ditto
	Van	50	11 11 0	Adam Eytton.
	ditto	50	11 11 0	Weston, Son, and Co.
	ditto	50	11 5 6	Mining Co. of Ireland.
	ditto	50	11 5 6	E. C. Goodhart.
	7-South Darren	20	15 2 6	ditto

BLENDE.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Dec. 31	Aberllyn	50	£1 13 0	Dillwyn and Co.
Jan. 6	Van	100	2 13 6	ditto

BLACK TIN.				
Date.	Mine.	Tons. c. q. lb.	Price p. ton.	Amount.
Dec. 22	Wheal Coates	6 0 1 5	£55 10 0	£333 10 4



## Mining Correspondence.

## BRITISH MINES.

**ABERLYNN.**—John Roberts, Jan. 5: The ground in the valley cross-cut continues of the same character; there are thick faces of blende on nearly all the joints. The winze at No. 2 is down nearly 2 fms. The lode is of just the same value as when we started; worth, I should say, 4 tons of blende per fathom. There is a strong lode in No. 2 end, mixed throughout with blende, but only just enough to pay for dressing. We are only carrying about 3 ft. of the lode, whereas the whole width is 20 ft., so we cannot say what the part we are leaving is worth. When we get up under the blende shaft we shall cross-cut through it to see what it is worth; but I want to get up to that point before cutting it through.

**ASSINGTON.**—Joseph Garland, Jan. 5: The 60, driving east of boundary shaft, was extended last month 3 fms. 2 ft. 10 in.; the portion of the lode carried (2½ ft.) contains occasional stones of lead and blende. The ground has become more favourable for driving, and the end is re-set for four weeks, to four men, at 6l. 15s. per fathom. Owing to the heavy rains the water has very much increased in the mine, and considerable repairs to the adit level have been necessary, and are being carried out.

**BEDFORD UNDER.**—H. Goldworthy, Jan. 5: Bridge Lode: The men have been putting in timber in McCullin's engine-shaft to secure the hanging-wall; consequently the lode will not be taken down until the early part of next week, when a report shall be sent you.—North Lode: The drive in the 127 and 115 is now being carried on by the side of the lode, so there is no change to report in this part of the mine.

**BELOWDA.**—J. H. Collins, Jan. 5: Considerable progress has been made in the new works for draining the great pit on the Beacon Burrow lode. The water meanwhile cannot be kept under by hand-pumps, and we are being delayed until the communication is brought up from the old shaft, as proposed. It is essential that this work be effectually done, as a large deposit of good quality tin ground will be laid open, and I find it improving in depth quite as I expected. In consequence of the delay named we are only stamping by day, but directly we have got rid of the water in the pit we shall resume full work, and shall have an abundance of good tin ground opened up for future working.

**BLUE HILLS.**—S. Bennetts, R. Harris, Jan. 1: The 80 east is worth 8l. per fathom. On the north lode both the 42 east and west ends are producing tin-stuff of low quality, and the 30 east end is worth 7l. per fathom.

**BODDLES.**—R. Hotchkiss, Jan. 5: The only change I have to report on from here-to-day is in the 17 east, where the ore is improving in the roof of the level, and has the appearance of still further improving.—Meadow Shaft: Progress here is not so good this week, owing to the ground being more difficult for breaking, but the men are working regular and well. The lode in the winze is still becoming smaller; this I think is a pinch in the lode previous to its opening out into a more productive lode. All other places as when last I wrote.

**BRYN-YR-AYR.**—J. Phillips, Jan. 5: Setting Report: The lode in the adit level driving west of cross-cut is 4½ ft. wide, producing about 20 cwt. of lead ore per fathom; let at 6l. 10s. per fathom; this drive has been extended through about 42 fms. in length of ore ground that has given an average yield of 13 cwt. of lead ore and 8 cwt. of blende per fathom. The adit level east of cross-cut is let at 8l. per fathom; lode 5 ft. wide, opening stoping ground, and appears to have entered a distinct shoot of ore. Surface operations going on regularly.

**BWLCH UNITED.**—N. Bray, Jan. 5: At the 50, driving on the slide, we are in about 5 fms., no sign of the lode yet making off in its usual direction, but we are meeting with strings and flashes of lead occasionally. In the roof of the 30 the men are doing their best for getting a rise in the ground to avoid the danger of sides in the large open workings beneath the ore ground said to be standing in the high back. The 109, driving east of Ritchie's, is without particular alteration, as the men have been engaged about the other underground work. The stope in the back of the 60 is yielding from 10 to 12 cwt. lead ore per fathom. The weather is again favourable, and our machinery working well as usual.

**CAMBRIAN.**—W. H. Richards, Jan. 4: Since my arrival here I have carefully gone over the surface and underground workings as far as practicable, and here-with beg to enclose you my report thereon.—Eggar Shaft: The eastern shaft is sunk below the 106 yard level 54 ft. at present, producing 2½ to 3 cwt. of copper per fathom, with occasional good stones of silver-lead ore; we purpose sinking this shaft 6 ft. deeper, in order to make it a 20 yard lift—the shaftmen are doing their best to get this done as quickly as possible, which, when completed, will enable us to open up the run of good ore ground sunk through in the shaft from the 106 for stoping. The 106 yard level east is driven 22 yards from shaft, showing good spots of copper and lead ore; I have two men cross-cutting the lode in this level, which is worth 3 cwt. of lead per fathom. The 106 yard level west is driven from shaft 6 ft., and at present idle; this level will be extended as soon as the shaft is sunk down to the 106 yard level, under the shaftmen. The 86 yard level, west of shaft, is driven 27 ft., producing good stones of copper and lead ore, with every indication of an early improvement for copper. The 86 yard level east is yielding a little lead ore. The 46 yard level east is principally composed of spar, gossan, and a little green carbonate of copper. In the 70 east the lode is of much the same character as in the 46. I have suspended the two men driving the 36, and put them to cut through the lode in the 86.

**CARNARVON COPPER.**—John Roberts, Jan. 4: In the 90 and the ground is much harder, with more quartz and patches of very rich copper through it; a very kindly end. There is no change in the winze at the 36. Fuller particulars with the setting report.

**CLEMENTINA.**—J. Roberts, W. Sandoe, Jan. 5: The 54 end, driving north, is getting very wet; and, as this is in this mine always the precursor of lead, we anticipate a good change for the better. We are strongly of opinion that we shall have a good run of lead ground in this direction. A good change has taken place in the stope, which had fallen off considerably, and we fear will throw us forward a little in the time of sampling, but we hope not for long. On the western end of the shaft, at the roadside, there is a good branch of lead, which we are stopping down from the bottom of the level, and shall continue to do so whilst we can keep it dry.

**CROOK BURN.**—W. Alder, Dec. 31: The sinking at the above mine is going on very favourably. The shaft is 2 fms. into the limestone. The branch of the vein is still continuing in the shaft, which is every way likely to lead to a strong vein. There are large pieces of ore coming out of the shaft every day.

**DENBIGHSHIRE CONSOLIDATED.**—A. Francis, R. Prince, Jan. 6: The very heavy rains have hindered us in our underground operations for the past fortnight, but every point in the mine is now in full operation, and I am very glad to say the discovery in No. 2 is one of the most valuable and productive. It is a splendid crop of ore; half of the blue lead taken from it was so rich and pure that it had simply to be picked, crushed, and placed in the lead-house without being washed at the floors. We have a long run of unexplored ground in the direction of this discovery, and the prospects are splendid. In the 112, driving west from the north cross-cut, I think a few days will see the rib of ore that is in the forebush open out and improve. The tribute pitches throughout the mine look well, and we shall weight out tomorrow 16½ tons of lead, and continue to be very busy on the dressing-floors, preparing the ore for sale on the 12th.

**DERESBY CONSOLS.**—J. Roberts, W. Sandoe, Jan. 5: There is no change since last week. There is a little lead in both ends.

**DERESBY MOUNTAIN.**—J. Roberts, W. Sandoe, Jan. 5: We have now driven in the cross-cut at No. 6 about 5 fms. The last 4 or 5 ft. driving have been in calcareous spar and quartz, mixed with large cubes of lead. There is now a large vein in the bottom of the end, which is letting out a great deal of water, which we consider to be a good indication. We anticipate that we have some thousands more to reach the foot-wall, to wit, in which nearly all the branches of the lode in the stope at No. 5 are dipping, and where we fully believe the main body of lead is. We cannot report any change of any importance, one way or the other, in the stope at No. 5. We may remark that the lead occurs in branches and layers, so to speak, so that we get one stope very good and the next may not be so well, and so, whilst one stope may improve, the other may decline, and thus, on the whole, keep about the same average value. We are, however, obliged to take all away altogether, as there is no working it any other way. The pitch working at No. 2 is being worked at 5l. 10s. per ton, and we believe, yielding lead to give the men about the average wages. We have sampled 30 tons of lead ore for sale on the 12th.

**DEVON GREAT CONSOLS.**—Isaac Richards, Jan. 6: Wheel Josiah: In the 144, east of Hinchin's shaft, on the south lode, the lode is 4 ft. wide, composed of capel, quartz, peach, muddle, and a little copper ore of good quality. In Penrose's winze, in the bottom of the 144, west of Agnes's shaft, on the south lode, the lode is 3 ft. wide, composed of capel, quartz, peach, muddle, and a small quantity of copper ore.—Wheel Emma, Inclined Shaft: At the 190 east, east of Daws's cross-cut, the lode has been cut into from 4 to 5 ft., which consists of capel, quartz, peach, muddle, and a small quantity of copper ore. In the 127 east, east of Fries's cross-cut, the lode part carrying 3 ft. wide, is composed of capel, quartz, peach, priam, muddle, and a small quantity of copper ore.—New Shaft, New South Lode: In the 205 west, the lode, part carrying from 4 to 5 ft. wide, is composed of capel, quartz, peach, some saving work of copper ore, and worth 3 tons of muddle per fathom. In the 175 east the lode is 3 ft. wide, and worth 1 ton of copper ore and 3 tons of muddle per fathom. In the 115 east the lode is 4 ft. wide, composed of capel, quartz, peach, and small quantities of copper and muddle ore. In the 100 east the lode is 4 ft. wide, composed of capel, quartz, peach, muddle, and a little copper ore. In the 90 east, the lode is 2 ft. wide, composed of capel, quartz, peach, priam, muddle, and a little copper ore. The Railway shaft is in regular course of sinking, and is about 2 fms. below the 190, the ground in which is tolerably favourable for progress. In the 130 west, on the north part of the lode, the lode is 4 ft. wide, composed of capel, quartz, peach, priam, muddle, and a small quantity of copper ore. In James's winze, in the bottom of the 175 east, the lode is from 4 to 5 ft. wide, composed of capel, quartz, peach, and small quantities of copper and muddle ore. In the 175 west, on the south part of the lode, the lode is 4 ft. wide, composed of capel, quartz, muddle, and a little copper ore. In Mayor's rise, in the back of the 175 west, on the north part of the lode, the lode is 3 ft. wide, and worth for length of rise (9 ft.) 2 tons of copper ore and 4 tons of muddle per fathom. In the 160 west, on the south part of the lode, the lode is worth 2 tons of copper ore, or 6l., and 4 tons of muddle per fathom. In Bone's rise, in the back of the 160, on the north part of the lode, the lode is 1½ ft. wide, composed of capel, quartz, peach, muddle, and a small quantity of copper ore. In Clarke's winze, in the bottom of the 145 west, the lode is 4½ ft. wide, composed of capel, quartz, peach, a little good quality copper ore, and worth 4 tons of muddle.—Watson's: The cutting of pits at the 76 is completed, and the plunger-lift from the 40 to this level is being fixed, which we hope will be completed in two or three days from this date.

**DERWENT.**—John Morpeth, Jan. 3: There is the least possible change in our underground workings since the date of the setting report posted last week. Jeffrey's Shaft, Middle Vein: The 95, east of shaft, for the full width (3 ft.), yielded about 23 cwt. of ore per fathom. No. 1 stope in the back, which is 11 ft. wide, yields for this width 27 cwt. No. 2 is worth 18 cwt. for the width taken—9 ft. No. 3 is 3 ft. wide, and worth 15 cwt., and the flats still produce 20 cwt. per cubic fathom. West of shaft over the 33 the stope is yielding 14, 12, and 12 cwt. of ore respectively; average width of vein 5 ft.—Sun Vein: This vein in the 70, east of shaft, is still very poor; vein 2 ft. wide.—Westgarth's Shaft, Middle Vein: The stope here are worth 19, 16, 10, 16, and 12 cwt. of ore per fm. respectively; average width of vein 4 ft.—North Vein: This vein is 3 ft. wide, and worth for length of rise (10 ft.) 2 cwt. of ore per fathom. The cross-cut at the 79, towards the north vein, has been standing during the past week, the men

having been helping to repair Westgarth's shaft, in which some of the brattice and footway was injured, but which in a few more days will be in order again. The stope over the 74, at the junction of Middle and Burnshields Haugh veins, is without change; vein 2 ft. wide, and worth 16 cwt. of ore per fathom. The stope under the 68, on the north vein opposite the shaft, as stated in last report, is in two parts, divided by a quantity of stone; for 6 ft. in length it yields 20 cwt. of ore per fathom. The severe snow storm of last week lasted till Saturday morning, when a thaw set in which has continued, and this morning drawing and dressing were resumed.

**DRAKEVALLS.**—M. Bawden, Jan. 6: The bore hole in bottom of deep adit is now down 44 ft., and we purpose on Saturday blasting it, when we hope to knock a hole through to the old workings.

**EAST BOTALLACK.**—George H. Eustice, John Hollow, Thos. Trahair, Jan. 5: Special Report: The engine-shaft is cleared up to the bottom of the 20, leaving the fork probably about 5 or 8 ft. now to clear the bottom. We have been enabled to go into the 20 fm. level to the end west, a distance of about 44 fms., and in the east end about 35 fms., but in the bottom of the level there is a small quantity of stuff that will have to be cleared. We are pleased to inform you that we are very agreeably surprised with the general appearance of the lode, it being of a strong masterly character, containing good stones of tin, but we have not yet been able to break sufficient quantity to ascertain its value. Against our next report we shall be able to give you more particulars. In the adit end we have driven round the choke into the original level, and expect in a few cores to get to the end. All other operations progressing satisfactorily.

**EAST GALLADON.**—James Kellow, Jan. 5: The only change to notice is in the 70 west on Fawcett, where the lode is a little improved; worth 1 ton of copper ore, or 5l. per fathom.

**EAST GIVERTON.**—R. Southey, Jan. 5: Since my last we have been pushing forward the driving of the 90 west with all possible dispatch. End driving by six men, at 4l. per fathom. Lode looking very kindly, with spots of lead in it. We have about 10 fms. further to drive to get under the lead ground gone down in the bottom of the 74. In the cross-cut south, at the 64, several branches have been intersected, letting out a large quantity of water; therefore, judging from present appearances, I should think the lode cannot be far off. All other points throughout the mine much the same as when I reported last.

**EAST DEVON CONSOLS.**—J. Browning, Jan. 4: I am pleased to state that the prospects of the mine are still very good. The driving of the adit level on the course of Brookwood lode thus far has proved to be most satisfactory. I may add everything in connection with the mine is going on favourably, and the prospects, especially in the bottom of the present driving, are exceedingly good. Judging from the appearances of the lode, I have every reason to believe that we shall have a continuous run of ore ground from the eastern to the western boundary.

**EAST LONG RAKE.**—William Vincent, Jan. 5: I have let a bargain to the men in the 50 cross-cut south towards Gin Lode at 12l. 2s. per fathom. The rock is hard, but a congenial white limestone, in which the lodes here are found most productive. The stripping of the 50 fm. level east on Middle Lode is progressing well. About 5 fm. have been finished, leaving about 10 fm. to reach the end of level. In taking up the bottom of the level to procure the necessary height good stones of lead are being got. The men who held the mine formerly have sunk two or three winzes in the bottom of the level, about 3 fm. deep, and they report good bunches of lead in the bottom of them. This ground can be opened up by a cross-cut from the bottom of the shaft at the 100 fm. level. This shall have my immediate attention when the wet weather is over. We shall then have no water at all to contend with. The tributaries are breaking good lead from the stope in back of 50 east on middle lode.

**EAST ROMAN GRAVELS.**—Arthur Waters, Jan. 6: In the 109 cross-cut south-west of boundary shaft the country rock appears to be of a congenial character, and I am looking forward to the cutting into the lode with interest. I do not see any reason why the lode should not be found productive in a section of country like this. The 97 south is now about 20 fms. from shaft; lode in the forebush 3 ft. wide, composed of white spar with small lead ore and blende, and copper. The leading branch, which I have previously mentioned, is now 20 fms. wide, producing good saving work for dressing; in fact the lode is increasing in value every time we take it down. I went underground this morning and took down a part of the branch, or in other words a portion of the lode. Mr. Jenkins this afternoon made an assay from what I broke, which made a produce of 140 ozs. 12 dwts. to the ton of ore. I doubt not but what the lode will become much richer as we are nearing the cross-course. Our engine and pitwork, with the winding gear, are in good working order.

**EAST WHEAL OREBOR.**—G. Rowe, Jan. 5: The south lode in the 70 west is 2 ft. wide, producing black oxide of copper, with occasional stones of ore, showing a very kindly appearance for improvement. The ground in the cross-cut, driving north on the slide towards the north lode, is improving for progress, showing indications of being near the lode. The north lode in the rise, in the back of the 70 east, is small and without change. The lode in the stope, in the bottom of the 60, east of winze, is worth 15l. per fathom.

**FOURTHS OF THE CONSOLS.**—J. H. James, Jan. 4: East Stope: Lode in this stope 12 ft., worth about ½ cwt. of tin per ton of lode stuff; four men in this stope raising stuff at 4s. per ton.—New Stope: Lode 15 ft. wide, worth about ½ cwt. of tin per ton of lode stuff; four men in this stope raising stuff at 4s. per ton.—South Stope on Great Cauter: Lode 16 ft. wide, containing rich work for tin; we have broken some large lumps of tin from this lode near half tin. This is a beautifully defined lode, extending through the entire length of the sett. We shall soon have two or three other stopes in this lode ready. We are almost now in a position to decide as to the best point for sinking the main engine-shaft. All our surface works progress satisfactorily.

**GAWTON COPPER.**—G. Rowe, G. Rowe, Jan. 1: The lode in the 117 east is improving in character, and showing a very cheering appearance, with arsenical muddle and good quality copper ore, worth 30l. per fathom. The lode in the 105 east is improving in size, yielding 6 tons of muddle and ore per fathom. The lode in the stope in the bottom of the 105, east of cross-cut, is going down 10 ft. wide, worth 40l. per fathom. The lode in the winze and stope in the bottom of the 105, west of cross-cut, is worth 12l. per fathom. We sampled yesterday, computed 108 tons of copper ore.

**GLENROY.**—R. Rowe, Jan. 4: The bottom level north continues about the same. The lode we are driving in is about 4 ft. wide, and composed of kindly quartz, and at times a little blende and lead, but not enough to save. In the shaft sinking below the 108 fm. level the principal part of the lode is now standing on the foot-wall, and owing to its taking a more downright course, and will probably not be productive for a long time. The lode is now being worked for new lead.

**GOSSEDD AND MERLLYN.**—E. Edwards, Jan. 6: In the 70, east from the north cross-cut, finding, as I expected we should, that the soft ground passed through in the cross-cut would dip down, I thought it advisable to put the men to sink on the bottom of the cross, for it is quite clear to me that the various branches of lead and blende through which we have passed, and all having an east and west tendency, must be connected with a strong body of lead ore. I have, therefore, been urging this sinking, and from the general appearances of the mine, I think it will all equal expectations. In the 70 west I am continuing the rise in the roof of the north and south lode, and intend carrying it through to the 50, thus affording ventilation, and enabling a good section of ground to be opened out for stoping. The men are obtaining splendid lead very cheaply, and there can be no doubt we shall have a further improvement in this direction. In the bottom of the 70 west tributaries are raising splendid lead ore in large lumps embedded in clay, and consequently easily extracted. The various pitches in other portions of the mine look well, and I think we shall have a better sale of lead ore at the end of the present month than we have had for some time.

**GRAT LAXEY.**—F. Redcliffe, Jan. 5: The 259 end, north of Welsh shaft, being entirely without change since last report, leaves no room for remark. In the 247 end north the lode contains a good deal of iron pyrites, with a little copper and blende, and worth of the latter 8l. per fathom; we are looking for a much more valuable and settled lode here. A stope commenced at No. 1 winze in the roof of this lode is worth 20l. per fathom. The end in the 235 north is still off the lode, the division lately driven upon having turned suddenly at a joint to join the other branch; it cannot, however, be more than a short distance away, and we have now given the lode turned down to get upon it again. The adit driving southward upon a division of the lode at this level near Welsh shaft is worth 18l. per fathom, and the stope at the same place 24l. per fathom.

The three stopes in the roof of this level further north are without much change, being worth 10l., 15l., and 20l. respectively. The cross-cut in the 220 has been driven 7½ fms., intersecting and cutting through the west branch, which is found to be about 3 ft. wide at this point, but poor. At the point of intersection it has a much greater underlie than the east branch, and the two will probably come together at no very considerable increased depth. No. 3 stope in the roof of this level has come up to a nip of poor ground, and the men are put to rise in the level a fathom or two further north, where the lode is worth 18l. per fathom. No. 2 stope is worth 20l. per fathom. No. 3 is exhausted. There is no change to notice in the stope above this.—Dumbell's: We cannot speak of the value of the lode in the 230 end north as it is all standing on the side. A cross-cut, however, is now commenced, and the lode will no doubt be laid open in a few days. At this level south the end is driven nearly far enough to communicate with the 220 deep mine, but being a little above it, perhaps about 2 fms. of sinking will be required to effect this. The lode very wide where the new winze is started in the 215 north, and only a portion is carried in sinking, that being worth 18l. per fathom. The three stopes in the roof of this level are worth respectively 20l., 25l., and 20l. per fathom. It will be observed that two of these stopes are much reduced in value, but there is much better ground immediately above, and also in advance of them. The 200 end is at present worth 12l. per fathom. As this end has been driven for a good while by power drill, and is now so much in advance of the level below, it is our intention to transfer the drill almost at once to the latter place, not being able to afford a drill as yet to keep both ends going. The winze in the 110 is not so good as it at first promised, now being worth 20l. per fathom. The lode in the 85 end is well increased in size, and should soon be in the ore ground. The stope in the south end of winze below this level is still worth 60l. per fathom, but the one in the north end of winze 30l. per fathom.

**GREAT RETALLACK.**—T. Harris, Jan. 1: The ground in the shaft has stiffened again, and the lode is vuggy, which renders our progress in sinking slower than when I last reported; it is producing a little blende, with spots of copper and muddle. The shaft is now 9 fms. 1 ft. 6 ins. below the 53, and I have re-set the shaft to sink at 8l. per fathom for 9 ft., at which depth I calculate to open a new level.

**GREEN HURTH.**—W. Vipond, Dec. 31: The south end of the standage level, from Swan shaft, is still twined and poor, yielding about 15 cwt. of ore per fathom. The end north is still yielding 2½ tons of ore per fm. The working going on the west branch, north of Swan shaft, is yielding 1 ton of ore per fm. The stope in the sole of the 30, north of Vipond's sump, is yielding 4 tons of ore per fm. The stope above the 30, near Robinson's sump, is yielding 12 cwt. of ore per fm. I think from appearances that we may have some improvement in this soon. Stope No. 6, above the 30, is getting into better ore; it is now yielding 1½ ton of ore per fathom. Driving south from Vipond's sump, at the random of No. 4 stope, is still yielding 3 tons of ore per fathom. We are still making the 30 good, just south of Vipond's sump, before commencing stoping. The vein has been worked a great width here, and requires extra timbering. We shall soon get to driving now in the cross-cut south from the adit level.

**GREEN HURTH.**—W. Vipond, Jan. 5: We estimate our present stock of ore, dressed and undressed, at something like 170 tons; I think it is not over-estimated at this. We have got a start with the dressing again this week, and we have cut the snow off the road to Crookburn head, so we shall probably have the carts here to day or to-morrow. Although we have not been getting so much ore the last week as we have been doing for some time, owing to the two stopes meeting in the sole of the 30, the mine is still looking well. The standage level north is yielding well in grey beds, hazles, and plate, and we shall soon be in a position to work the rich ground above this, up to the sole of the 30. The driving south from Vipond's sump is also showing the hazles from the incline level to the 30 to be very productive going that way. We shall soon have nearly all the work we get coming up the Swan shaft, excepting the stope near Robinson's sump and stope No. 6 above the 30. We certainly commence the new year with a more favourable prospect than we have ever had previously, and are more sure of a mine in depth, as well as in the lower limestone, which has proved so rich, and is yielding so well at present.

**GWERN-Y-MYNYDD.**—A. Francis, Jan. 5: Deborah: Here the same favourable appearances continue at each point of operation, and so strong are the indications in both the north and south drivings in main flat that we are daily in expectation of a find. We find in the flat matrix all the ore-bearing conditions that accompany large deposits, and we must soon succeed in discovering its whereabouts. Rains during the last month have much interfered with our progress at Deborah, and so damaged our main shaft as to necessitate repairs to same. This will take a few days to complete, which we shall take advantage of to relax our ladders and improve our way.—Gwern-y-mynydd: The masons have had a few days work upon the main flue to chimney, and I hope the same will be finished next week, when we shall be ready to operate upon the stripping of Treasure shaft. The engine-boilers and connections, together with the pitwork in the shaft, are all completed. The main adit is steadily being driven, but the progress is slow in consequence of the hardness of the ground, and the distance to haul the stuff.

**HINGTON DOWN.**—T. Richards, Jan. 5: No. 1 lode, in the deep adit level east of the south cross-cut, is composed of capel, quartz, peach, priam, and muddle, and a little copper ore. No. 2 lode, in the deep adit level east of the south cross-cut and east of the cross-course, is somewhat better defined, but still in disorderly ground. Fair progress is being made in the engine shaft sinking below the deep adit level. The lode continues to produce a little saving work, in which are some very rich stones of copper ore.

**KIRK MICHAEL.**—R. Rowe, Jan. 5: The lode in the sump is worth about 15 cwt. of lead to the fathom. The stope north of the shaft is looking to-day as well as I have seen it at all. We find the ground variable. Last week the stope was not so good, but I again value it at 2 tons to the fathom; the lode is just getting into elvan ground, and looking altogether very well. The improvement in the lode as we get down and northward is very manifest. On account of the stope we cannot conveniently work the top stope at present; this will be obviated as soon as the north shaft is cut down. The arrangements for drawing from both parts of the mine are now finished, and working very satisfactorily. We shall now attach the engine, to be an auxiliary to all the work—the pumping, drawing, and crushing—when the water power fails, which at certain seasons it will do.

**LADY ASHBURTON.**—James Willcocks, Jan. 5: The 15 fm. level is now advanced west of engine-shaft 2½ fms. The lode is fully 4 ft. wide, composed of congenial friable quartz, arsenical and arsenic muddle, containing silver, lead, and copper. The leading branch, which I have previously mentioned, is now 20 fms. wide, producing good saving work for dressing; in fact the lode is increasing in value every time we take it down. I went underground this morning and took down a part of the branch, or in other words a portion of the lode. Mr. Jenkins this afternoon made an assay from what I broke, which made a produce of 140 ozs. 12 dwts. to the ton of ore. I doubt not but what the lode will become much richer as we are nearing the cross-course. Our engine and pitwork, with the winding gear, are in good working order.

**LADY BERTHA.**—Thomas Neil, Jan. 5: Since my last report we have been sinking the ground, so as to enable us to drop another lift. This, I am pleased to say, has been done, and we have succeeded in reaching the 20. As soon as we fork out the water from this level we shall at once commence to put men to stope the backs and drive the two ends east and west of shaft, when we hope to be able to break copper ore and arsenical muddle. The stope in back of the 10 is producing some fine muddle, samples of which have been sent to the company's offices. We are preparing the dressing-floors, so as to be ready for dressing purposes as soon as the hauling machinery is finished. All our underground and surface operations are being pushed on with all good speed.

**LADY WELLS.**—Arthur Waters, Jan. 6: We are getting some good stones of lead ore from the adit end going south of new shaft, and the country rocks is just what we like to see on each side of a lode in this district. I calculate that the forebush is now entering the same beds as those seen in the productive sections south of the new engine-shaft at Roman Gravel Mine. We are pushing the adit forward by six men, and are hopeful that something good will be met with.

**LLANDEGLA.**—H. Hotchkiss, Jan. 5: The weather being more favourable this week for outdoor work, the mason is busy at the building; and if weather will permit, he will so far finish to-morrow that the carpenter can commence putting on the roof. In the north lode the ore fell off a little during the latter part of last week, but is, I am pleased to say, looking better again this week, and appears to be lengthening out a little more.

**LOMAX.**—Wm. Argall, Jan. 5: The lode in the end driving north, on Tatle Pie lode, is disordered. Probably we are getting near the great flooken course; it still produces good stones of iron and occasion stones of silver-lead. Our great aim will be in getting the lode to the north of this flooken course. There is nothing new to report on Thompson's lode.

**MELANEAR.**—J. Gilbert, Jan. 5: Gundry's Shaft: The 30, west of shaft, on the south part of lode, was driven last month 4 ft. 8 in.; the lode is 2½ ft. wide, yielding ½ ton of copper ore per fathom, and some good stones of muddle and blende. The 50 fathom level, west of shaft, on the south-east part of the lode, was driven 3 fms. 1 ft. 1 in.; the lode is 3 ft. wide, and yielding 2 tons of copper ore per fathom. The 60 fathom level, west of shaft, on the main lode, was driven 2 fms. 2 ft. 4 in.; the lode is 2 ft. wide, composed of spar, and yielding some good stones of copper ore, lead, and blende. The 80, west of shaft, on the main lode, was driven 2 fms. 4 ft. 8 in.; the lode is 2½ ft. wide, and yielding ½ ton of ore per fathom. The 40, west of shaft, on the south part of the lode, was driven 4 ft. 2 in.; the lode is 6 ft. wide, and yielding 3 tons of ore per fathom. The 90, east of cross-cut, on the south part of the lode, was driven 1 fm. 2 ft.; the lode is 4½ ft. wide, and yielding 3 tons of ore per fathom. The 100, west of shaft, was driven 1 fm. 2 ft.; the lode is 5 ft. wide, and yielding 1 ton of ore per fm. The 110, west of shaft, was driven 2 fms. 4 ft. 8 in.; the lode is 3 ft. wide, and yielding some saving work for copper ore. The 70 cross-cut, north of the skip-shaft, was driven 1 fm. 3 ft. 8 in.; the ground continues good for driving, and congenial for copper ore. The winze in the bottom of the 40, west of Gundry's shaft, was sunk 2 fms. 6 in.; the lode is 5 ft. wide, and yielding 1 ton of ore per fathom. The winze in the bottom of the 50, on the south-east part of the lode, was sunk 1 ft. 3 ft. 10 in.; the lode is 5 ft. wide, and yielding 6 tons of ore per fathom. The winze in the bottom of the 70, on the main lode, was sunk 4 ft. 6 in.; the lode is 2½ ft. wide, and yielding 1½ ton of ore per fathom. Gundry's shaft was sunk below the 110 5 ft. 10 in.; the shaft continues rather hard for sinking, but a softer channel of ground appears to be coming in the eastern end of the shaft. The old engine-shaft was sunk below the 100 4 ft. 4 in.; there is nothing new here, and the men have now employed a good deal in taking up the water at the bottom of the shaft, while the water has been in the back of the 40, west of Gundry's shaft, was put up 2 fms. 5 ft. 7 in.; the lode is 4 ft. wide, and yielding 3½ tons of ore per fathom. The rise in back of the 70, west of Gundry's shaft, was put up 1 fm. 5 ft. 10 in.; the lode is 2 ft. wide, and yielding 2 tons of ore per fathom.

**MOUNT CARBIS.**—George Johns, Jan. 6: The mine is looking well throughout, and the lode in the 27 east quite as good as reported, worth 50l. per fathom. We require the engine to be put to work before we shall be enabled to work the lode continuously or to sink below the level, where we have a good crop of tin going down a great length. We are getting out the foundation for engine-house, &c., now rapidly.

**MYNYDD GORDDU.**—J. G. Green, Jan. 5: The engine-shaft has been deepened 3 ft., now down 50 ft. below the 34. We have been hindered considerably through breakages to the rods, but I hope to have the new and stronger line at work shortly, after which we will be secured from similar interruptions. I have removed the men from stoping in the sole of the 12, to drive on the north part of the lode in the 34, close to No. 1 stope. There are nice spots of ore at this point, and it is worthy of further trial. The shaftmen have been working a few stems on the north side of the 34, at the point where the south counter intersects the main lode; the lode here yielding about 2 tons of blende per fathom. No. 1 stope in the 34 is not so rich for ore, worth 10l. per fathom, the lode being about 12 ft. wide, a mass of quartz, felspar, and carbonate of lime, with patches of lead (to the above value) disseminated throughout. I expect to have a rich lode under this stope in the 45 fm. level. No. 2 stope has improved, worth 14l. per fathom. The stope in sole of the 12 is worth 10l. per fathom. The most encouraging vestment, without change to notice of much value. It presents a most encouraging appearance, though not as yet of much value. We are delivering the parcel of ore sold to Messrs. Goodhart at 13l. 2s. 6d. per ton, and I will be able to send you weights, &c., by Saturday.

**NEW BRONFLOYD.**—Thomas Kemp, Jan. 6: Setting Report: North Lode: The men in the pitch over the 121, east of winze, are still employed in hauling and dressing their orestuff, consequently this bargain is not reset. An arch of ground in the sole of the 52, east of No. 3 shaft, gave way some time ago, carrying with it a great quantity of the north or hanging side; in consequence the said arch is buried in about 3 fms. of debris, and four men are now employed in removing it at 120s. per ton, and the ore to be made marketable. The men in the stope over the 52, east of shaft, are still breaking good leadstuff; lode worth 1 ton of ore per cubic fathom.—Middle Lode: Two men to strip down the north part of the lode in the 73, west of cross-cut, at 100s. per fathom; this part of the lode is principally composed of spar, strongly intermixed with ore. Six men to further continue the 63, or intermediate level, west of cross-cut, at 280s. per



lead ore. A stop in back of level in vein 3 ft. wide, and worth 15 cwts. of lead ore per fathom, wrought at 100s. per ton of dressed ore. I have placed a pare of men to sink below the horizontal bed, upon which this level has been driven at the junction of Craven Cross with the new vein, some 3 fms. west of shaft, and so far the vein has been opened up to a depth of 12 fms. below the level, and much pleased with the favourable and improved appearance of the lode, which appears to increase both in size and value as we get down. I have therefore determined to cut a winze plat here, and sink a few fathoms, to further prove its value at an increased depth. The 58 upon the new vein has



been extended a total distance of 92 fms. west of shaft. We have here the most severe "rip" experienced in that direction. The lode is small and the country rock hard, indicating that we are passing through a knotty band of unproductive ground. A stope 11 fms. behind the end in a vein 2 ft. wide, worth 15 cwt. of lead ore per fathom. We have two stopes below the level between two horizontal beds, in a lode averaging 2 ft., and producing 20 cwt. of lead ore respectively. A stope west of No. 1 rise above the 50, in a lode 2 ft. wide, worth 12 cwt. of lead ore per fathom. The north cross-cut to the parallel lodes is in from the main level 65 fms.; the ground here is easier to work, and consequently much better progress is being made. We are occasionally meeting with branches or faces of spar, but as yet nothing worth driving upon. We have three pitches at 100s. per ton of dressed ore, and our machinery, both underground and on surface, is all in good order. Dressing and other operations proceeded with as well as the weather and short days will permit. We have 30 tons of lead ore at the mill in course of smelting.

WEST VOR.—S. Harris, Jan. 6: The winze sinking below the adit level, east of cross-cut on the Great Vor lode, is down 4 fms. 1 ft. The lode in the present bottom of the winze is 4 ft. wide, of a very kindly nature, and producing tin. We have just intersected a branch in the north part of the winze about 3 in. wide dropping down in the lode, and will be on it by sinking 6 ft. deeper, and I have no doubt this will increase its value. The branch is composed of prinn and peach, also contains tin. The winze is let to four men at 8s. per fathom.

WEST WHEAL PEEVOR.—W. T. White, J. Pryor, Jan. 4: Since the meeting we have cut the lode in the 55 cross-cut, and communicated this level with the winze sunk from the 45; the lode at this point is of a similar character to the lode in the end driving west at this level from Wheal Peavor. We are now driving towards this, and we hope to communicate those two points in at least a fortnight's time, when our position for breaking and discharging tinstuff will be greatly improved. Our new house for the winze is up, and shall commence putting the roof on to-morrow, which we hope to complete this week. It is our pay and setting on Saturday next, and next week another report will be sent out.

WHEAL GRENVILLE.—T. Hodge, Dec. 30: We have not yet intersected the lode in the 190 north cross-cut, but it may be expected in another few feet driving. There is no change in the other bargains worthy of note. I will furnish a full report for the general meeting in a few days.

WHEAL JANE.—R. Southey, Jan. 5: Since my last report good progress has been made in driving the cross-cut south at the deep adit level to intersect the Ready Money lode, and I expect to meet with it on or about the end of the present month, when we shall at once commence to drive west on the course of it to meet the end coming east. This will lay open a piece of profitable ground for nearly a hundred fathoms in length, but as a matter of course we shall not reap any benefit from this ground for the present quarter, as it will take us all the time to open it up. Our stopes and ends throughout the mine are much the same as when last reported on. At surface the new erections are progressing very satisfactorily. The new steam capstan is delivered, and the loading to receive it completed. The old pitwork for 40 fms. deep is drawn to surface, and the shaftmen have commenced to put down the new. Two of our boilers at the steam stamps gave out, and the stamps in consequence were idle for three weeks, during which time the boilers have undergone a thorough repair.

WHEAL JEWELL.—W. T. Bryant, Jan. 4: At the engine-shaft we have about 4 ft. further to sink for a 70 fm. level; no alteration to call for remark in the lode. The 60 east produces occasional good stones of copper ore, but not to value. We are making fair progress in the 50 cross-cut south, and hope to see the lode in the course of nine days or a fortnight. In the 40 east the lode is of much the same character as last reported, being a splendid looking lode, and mineralised throughout. I purpose putting in a cross-cut through it, in order to ascertain its size and character. The 40 west is without any change since my last. I am anxiously looking forward to cutting the lode in the 50 east. I consider this an important point.

WHEAL PEEVOR.—W. T. White, T. C. King, Jan. 4: We have no particular alteration to report since our meeting. All the points in operation are progressing very favourably, and we are pleased to say the 70, 80, and other ends are equally as good as when reported for the meeting. Next week is our pay and setting week, after which a full report, giving valuation, &c., will be sent out.

WHEAL RUSSELL.—J. Gifford, John Bray, Jan. 5: In Matthews' engine-shaft the lode continues its size and promising character, being 3½ ft. wide, composed of capel and quartz, impregnated with both mundle and copper ore. In the stope in the back of the deep adit, west of shaft, the lode is 3 ft. wide, worth 9s. per fathom. In the rise in the back of the 55 east the lode is 2½ ft. wide, and looking more promising when last taken down; now yielding 2 tons of copper ore per fathom—worth 6s. per fathom. In the 55 cross-cut north the ground is more favourable for progress, and strongly mineralised.

WHEAL UNY.—H. Eddy, M. Rogers, Jan. 6: The stope in back of the 140, east of old sump, on the north part of the lode lode, is worth 10s. per fm. The 172, west of incline, is worth 12s. per fm. We have started a rise in back of this level, which is worth 10s. per fathom. No material change elsewhere.

## TO THE METAL TRADE.

FOR COPPER, TIN, LEAD, &c., apply to—  
MESSRS. PELLY, BOYLE, AND CO.,  
SWORN METAL BROKERS,  
ALLHALLOWS CHAMBERS, LOMBARD STREET, LONDON.  
(ESTABLISHED 1849.)

JOHN G. EAST,  
NEWCASTLE-ON-TYNE.

BROKER FOR THE SALE OF PIG-LEAD, LEADPORES,  
COPPER ORE, COBALT, MANGANESE, CARBONATE OF  
BARYTES. ESTABLISHED 1866.

## The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JAN. 7, 1881.

IRON.	£ s. d.	£ s. d.
Pig, GMR, f.o.b., Clyde	13	13 13 6
" Scotch, all No. 1	2	14 0
" Birs, Welsh, f.o.b. Wales	5	2 6
" " In London	5	15 0
" Stafford	6	15 0
" In Tyne or Tees	5	12 6-5 15 0
" Swedish, London	9	0-10 0
Rails, Welsh, at works	5	5-5 10 0
Sheets, Staff., in London	8	0-0
Plates, ship, in London	7	2 6-7 5 0
Hoops, Staff.	7	0-0
Nail rods, Staff., in Lon.	6	5-6 15 0
STEEL.	£ s. d.	£ s. d.
English, spring	13	0-0-19 0 0
" cast	30	0-0-40 0 0
Swedish, keg	15	0-0
" fag. ham.	15	10 0
LEAD.	£ s. d.	£ s. d.
English, pig, common	15	5 0
" " L.B.	15	6-15 12 6
" " W.B.	16	0-0
" sheet and bar	16	0-0
" pipe	16	10 0
" red	17	10 0
" white	22	0-0-24 0 0
" patent shot	18	0-0
Spanish	15	0-0
COBALT.	£ s. d.	£ s. d.
Metal, per cwt.	15	0-0-16 0 0
Ore, 10 per cent, per ton	20	0-0-25 0 0
QUICKSILVER.	£ s. d.	£ s. d.
Flasks, 75lbs. var. (nom)	6	7 6
SPELTER.	£ s. d.	£ s. d.
Silesian	16	15 0
English, Swansea	16	0-0
Sheet zinc	19	5-0-20 10 0

\* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; 1X 6s. per box more than 10 quoted above, and add 6s. foreign X. Terms—plates 2s. per box below tin-plates of similar brands.

REMARKS.—The new year has opened in a most satisfactory manner for the metal trade, buying for most metals having been very spirited throughout the whole of the week, while improved prices have been paid, and a buoyant tone has prevailed in every branch. The general opinion which exists seems to be to the effect that during the early part of this year there will be a similar amount of buying as at the corresponding period of 1880, and operators become more and more anxious to secure their purchases at any great advance be effected, believing that the spurt which has taken place this week is the commencement of the recovery in prices which for so long past has been promising. The increased business which has been transacted since the turn of the year may also probably have been stimulated, more or less, by the improved statistics of some metals. For some time back a manifest disposition has been predominant to enter into contracts, but at the same time a feeling of some hesitation has existed amongst operators, not because of the prevalence of any fear that the development in the trade would not meet the anticipations formed of it, but on account of buyers generally being reluctant to be the first to make purchases, and they have continued to hold off in the hope of buying at the minimum of the market, but now buyers seem to believe that it is too risky to withhold their orders for any lower rates, and hence the cause of the sudden animation is seen. The favourable reports from the Colonial markets which give so much promise of a still further increase in the demand, combined with the fact, as seen by statistics, that during 1880 the wants of the trade for the chief metals were in excess of the supplies, are the principal causes which have goaded buyers on to make purchases without delay, and nothing has arisen so far to damp this confidential tone. The only fear which presents

itself is that speculators may be carried too far away by the bright prospects and purchase freely, whereby an inflation may occur in the markets, and prices be advanced too rapidly, and thus check the *bona fide* trade, but with a steady increase in the demand and supply, the former continuing in excess of the latter, there can be little or no doubt but that any reasonable rise which may be made in prices will be permanently maintained. Advances from the Continent are also satisfactory, and, as a very fair amount of business is being transacted for home consumption, there seems every prospect of vitality in the demand for some time to come.

COPPER.—The improvement which occurred in prices last week has been maintained, and a fair business has been transacted. The price of Chili bars on Monday advanced from 62l. 15s. to 63l. 5s., but has since been rather fluctuating, and down to 62l. accepted. The better tone probably arises from the more favourable statistics which were published on the 1st inst., the total visible stock having been reduced to 60,610 tons against 62,229 tons on the 1st of December, and 62,140 tons on the 1st of January. It is also interesting to note that the stock is less than upon the first of any month last year. To commence the new year the visible stock was 1530 tons less than that with which last year opened, while the price of bars was 4l. per ton less. It is therefore not surprising that buyers should have displayed more disposition to enter into contracts and the improved price will doubtless be upheld for some time to come, and with the continuance of a fair demand prices may not unlikely further advance. The stock of Chili produce in first and second hands in Liverpool and Swansea on the 31st ult. was reduced to 32,942 tons, the imports during the last fortnight of December being 1312 tons, and the deliveries 1712 tons. As regards manufactured there has been a fair inquiry for India, but as sellers are asking somewhat dearer prices, business has been rather limited; sellers are, however, confident of realizing increased rates shortly, and believe buyers will have to increase their limits in order to make business practicable. At the public ticketing held at Swansea last Tuesday 1783 tons of copper ore of an average produce of 7½ per cent. realized an average price of 11s. 8½d. per unit.

IRON.—There has been an animated market this week for Scotch pigs, and higher prices have been realized, while a fair inquiry has existed for manufactured, and prices have been steadily maintained. The improved tone arises from the fact that the market is in a sounder and better statistical position than at first sight appears. For instance, the public stock in Glasgow last month showed an increase of no less than 13,563 tons, amounting on the 31st ult. to 497,718 tons; but, on the other hand, the makers' returns are more favourable, and show that their private holdings last year diminished by a far greater extent than what the public stock increased. Of course, it is of consequence whether the iron is stored away in public or private warehouses, providing the production does not exceed the requirements of the trade. Of the two it may perhaps be preferable that it should be sent to the public stores, for statistics are published oftener than makers' returns, and hence the trade has more frequent opportunities of seeing the actual position of the market. Another favourable reason why public stocks should be allowed to accumulate rather than the private stocks is, to a certain extent they are more likely to tend to check undue speculation, for if operators see that the public stock is decreasing they are apt to come to the conclusion that the iron must necessarily be going into consumption, and this idea causes a stronger disposition to buy, whereby an inflation would not unlikely occur, and prices be too speedily advanced to the detriment of regular trade. The great decrease which took place in private stocks in Scotland last year is a most promising feature, and strongly indicates that makers must be running very bare of stock, and to meet the requirements of the trade it becomes more and more evident that iron will have to be drawn from the visible stocks. If the wants of the trade were diminishing, then the reduction which has been effected in the total stock might not be a matter of so much importance; but since there is every indication of a growing increase in the trade requirements, there seems a good prospect of some great portion of the unprecedented heavy public stocks being reduced. As we pointed out last week, the consumption and shipments all last year were far in excess of any for some few years previous, and there is every reason to expect that the legitimate wants of the trade will continue to increase, and improved prices be realized. The wages dispute is just now giving some cause for anxiety, especially in Staffordshire, where some of the men are said to be on strike. A good business has this week been transacted in the Glasgow warrant market at rather variable rates. Monday being appointed a holiday in Scotland there was no market, but on Tuesday business was done between 53s. 6d. and 53s. 9d., and on Wednesday between 52s. 10d. and 53s. 3d., while yesterday the market was steady at 53s., and closes today at 53s. 4d. to 53s. 6d. An improved tone has been perceptible upon the Middlesbrough market, and higher prices have been realized than for two months back; No. 3 being held for 42s., and forge iron for 41s., with buyers at a shade under. For delivery by the end of March, makers are quoting 42s. 6d. for No. 3. Inquiries for warrants are fairly numerous, but the advanced prices have formed a check to business, quotations being chiefly at 43s. to 43s. 8d. for No. 3. Last Tuesday the stock held by Messrs. Connal and Co. had increased by 3737 tons, amounting to 127,890 tons. The total shipments last month were about 79,000 tons, which although rather small are nevertheless up to the average of the other months in the year. The total shipments of pigs last year from this district are estimated at about 960,000 tons, of which about 90,000 tons were shipped to the United States, and 285,000 tons to Scotland. Briskness characterizes the manufactured trade, especially amongst the plate makers, who remain firm in their quotations, at 6l. 17s. 6d. to 7l., while angles are held for 6l. 17s. 6d. to 6l., other description being quoted as before. Sellers at Wolverhampton are firm in their price, and a moderate number of transactions are reported. Some good brands of singles are said to have been sold at 7l. 10s., while the usual difference in price has been paid for doubles and trebles, but a few of inferior brands have been sold at about 6s. to 10s. per ton less. Holders of pigs have shown no disposition to press sales, while prices have displayed an improving tendency.

At Birmingham very little business is reported to have been transacted; nevertheless, inquiries are fairly numerous and prices are firm, especially for galvanized iron, owing to the increased value of spelter. There are still one or two of the mills which have not restarted since the vacation, owing to the indisposition on the part of the men to resume work at the existing scale of wages. Most of the mills and forges, however, have recommenced work, and at one or two establishments operations are of a fairly brisk character. No fresh feature is to be reported from Sheffield, but with a fair demand prices have been steadily maintained. A buoyant tone prevails in the Welsh districts, and notwithstanding that the American demand has not revived, yet increased orders are being received from Indian, continental, and home consumers, which compensates makers for the deficiency in the American demand, and the utmost confidence exists that there will be a development in the future demand from those markets. Advances from America report lower prices for Scotch pigs, but at the same time transactions continue numerous. Gartsherrie, Glengarnock, and Coltness have fallen 2s. per ton, the first two being quoted at 22s. 5d. for No. 1, and the two latter at 23s. 5d. Quotations for Eglinton remain unaltered at 21s. 5d. Large sales continue to be made in scrap and old rails, while quotations remain without change, scrap being held for 27s. 5d. and old rails for 28s. 5d.

TIN.—A very large amount of business has been transacted in this metal, and prices have fluctuated considerably betwixt 91l. 10s. and 93l. for the foreign. On Monday transactions were carried through chiefly between 91l. 10s. and 92l. cash, improving on Tuesday to 92l. 17s. 6d. to 93l., receding however again on Wednesday to 92l. 10s. to 91l. 15s., but yesterday the market improved to 92l. 10s., and closes today at 92l. 10s. to 92l. 15s. The statistics published on the 31st ult. were not so satisfactory as those issued at the end of November, the visible stock having increased to 13,584 tons against 12,966 tons on the 30th November last, and 14,833 tons on the 31st December, 1879. The opening price for this year was 91l., the same as that quoted at the beginning of 1880, while the stock is 1249 tons less, so there seems little to doubt that at least a similar advance as took place last year will be again effected. The deliveries in London and Holland during December were not so good as in November, being 1541 tons against 2120 tons. The shipments from Straits last month were 750 tons and from Australia 900 tons. The total shipments from Straits and Australia last year were 10,703 tons against 10,986 tons in 1879, and the total deliveries in London and Holland in 1880 were 20,751 tons against 21,250 tons in the previous year. A sale is just announced for the 25th inst. at Rotterdam of 18,200 slabs Banca and 4800 slabs Billiton.

LEAD.—There is hardly any change to be reported in the state of this market, the demand continuing rather quiet, but prices have been steadily upheld for all descriptions. SPELTER.—The sudden rise which took place in this metal at the end of last week has not only been maintained, but prices for Silesian have further advanced, while English hard has also been quoted at improved rates. The tone appears good, and higher prices are looked for. TIN-PLATES.—Business is rather restricted, but prices remain without change. QUICKSILVER is without improvement. STEEL.—This market has continued rather quiet, and prices steady. The demand for rails for America has not materially revived; never-

theless there is a moderate business doing, but inquiries for other descriptions keep limited.

THE MINING SHARE MARKET opened rather actively this week, and a rise took place in the price of several prominent shares. After awhile, however, it became quieter, and the advanced quotations were scarcely sustained.

The shares mostly dealt in were Carn Brea, Bedford United, Wheal Crebor, West Crebor, East Lovell, Hingston Down, Parys Copper, Prince of Wales, South Frances, West Caradon, New West Caradon, Wheal Peavor, and a few others.

TIN.—The standards for tin are advanced 2l. per ton on Monday, and as tin has been firmer in the metal markets, a fair amount of business has been done in tin shares, and in some cases at a considerable advance on last week's prices. They all leave off firm. Carn Brea rose on Monday 15l. per share, and, after several fluctuations leave off 122½ to 125. South Condurrow, 10½ to 11; at the meeting here, the accounts showed a profit of 2583l. in five months' working, and a credit balance of 5131l., out of which a dividend of 10s. per share (3062l.) was declared. During the past twelve months the mine has sold 551 tons of tin, which had realised 29,391l., and made a profit of 10,181l. The agent reported that the mine had decidedly improved during the year.

Cook's Kitchen, 12 to 12½; call of 10s. paid. At the meeting a loss was shown on four months' working of 1154l., and a debit balance of 2678l. New Cook's Kitchen, 5½ to 6; the accounts showed a loss here of 891l. on four months, and a debit balance of 1558l. Blue Hills, 3½ to 4; Dolcoath, 5½ to 58½; East Pool, 35 to 36. East Lovells have been weaker at 4 to 4½. Polrose, 1½ to 2; South Frances, 12 to 12½; Tincroft, 21½ to 22½; West Basset, 14½ to 15½. West Frances, 10 to 11; at the meeting the accounts for four months showed a balance against the mine of 5346l. West Peavor, 16 to 17; West Phoenix, 1½ to 2½; Wheal Basset, 5 to 5½; Wheal Grenville, 10½ to 11; Wheal Jane, 15s. to 20s.; Wheal Jewell, 8 to 8½; Wheal Kitty (St. Agnes), 4 to 4½; Wheal Peavor, 27 to 29; Wheal Uny, 4½ to 4½; Wheal Coates, 20s. to 25s.; West Kitty, 1½ to 2; New Kitty, 25s. to 35s.; North Penstruthal, 1½ to 2½; New Peavor, 2 to 2½; South Crofty, 9½ to 10.

COPPER has been much firmer, and at the Cornish Ticketing, on Thursday, the standard for ore advanced 3l. 5s. per ton; the average price of the ore sold was 3l. 8s. 6d. per ton. Several copper mines have been in more demand, at advanced rates. Devon Great Consols, 16½ to 17½; Devon Great United, 2½ to 2½; Wheal Crebor, 4½ to 4½. West Crebors have been largely dealt in, and leave off 9s. to 11s. Bedford United also in good demand, and leave off 27s. 6d. to 32s. 6d. East Caradon, 1½ to 1½; East Crebor, 15s. to 17s. 6d.; Gunislake (Clitters), 3½ to 4; Carnarvon Copper, 3 to 1; Hingston Down, 1½ to 1½. Mellanear, 4½ to 5; at the ticketing, on Thursday, 625 tons of ore realised 1870l. Marke Valley, 1½ to 1½; Morfa Du, 17s. 6d. to 22s. 6d.; Parys Corporation, 20s. to 22s. 6d. Prince of Wales have been largely dealt in, and leave off 20s. to 22s. 6d. West Caradon, 1½ to 2½; New West Caradon, 15s. to 17s. 6d. West Tolgus, 50 to 55; the sale of ore here (197 tons) realised 1058l. West Seton, 17 to 19. Mona, 15 to 15½; the 70 east is reported as still very rich, and other parts unchanged. South Crebor, 1½ to 1½; Gawton, 25s. to 30s.

LEAD mines have not been so much dealt in as copper and tin, and quotations are mostly nominal. Van, 15 to 16; the bottom levels are looking very well. The sale of ore on Thursday (200 tons of lead and 100 tons of blende) realised 2250l. Roman Gravel, 9½ to 10 Tankerville Great Consols, 10s. to 15s.; at Pennerley and Bog they expect to start the engine to pump in about a fortnight. East Roman Gravel, 17s. 6d. to 20s.; the stope in north of winze is worth 2½ tons of lead ore per fathom, south 2½ tons, and the winze below this level 3 tons. Bwlch, 2 to 2½; Derwent, 2½ to 2½; D'Eresby Mountain, 40 to 50; East Craven Moor, 1½ to 1. East Van, 1½ to 1½; Frongoch, 4 to 4½; this mine sold on Dec. 31 100 tons of blende, at 3l. 2s. per ton. New Wye Valley, 1 to 1½; has sampled 50 tons of lead. Glenroy, 4 to 4½; Gorsedd and Merilyn, 2½ to 3; Great Holway, 4 to 5; Great Laxey, 18½ to 19½; Grogwinion, 3 to 3½; Herodsfoot, 15s. to 20s.; Leadhills, 2½ to 3.

North D'Eresby, 20s. to 25s.; Pandora, 2 to 2½; Pen-y-Orsedd, 1 to 1½; Port Nigel, 2 to 2½; South Darren, 2 to 2½; West Chiverton, 1½ to 1½; West Holway, 1½ to 2; West Lisburne, 1 to 1½; Kirk Michael, 1½ to 1½; Gwern-y-Mynydd, 2½ to 3. The ground at Deborah Shaft is favourable for ore, but during the past week operations have been delayed by the rain. Hartington, 1 to 1½; Mawston, 1 to 1½; Red Rock, 2 to 2½; West Wye Valley, 1 to 1½.

FOREIGN MINES.—English-Australian, 15s. to 20s.; Arendal, 2½ to 3; Brazilian, 1½ to 1½; Blue Tent, 1½ to 2; Birdseye Creek, 1½ to 2; Cape Copper, 41½ to 42½; Canadian Copper, 2 to 2½. Copiapu, 13 to 14; the profit made in four months is 6000l., and a dividend of 7s. 6d. per share has been recommended. Don Pedro, 12s. 6d. to 15s.; South Indian Gold Mine, 2 to 2½; Indian Glenrock Gold Mine, 1½ to 1½; Indian Phoenix Gold Mine, 1½ to 1½; Devala-Moyar Gold Mine, 1½ to 2½ ex all. Frontino and Bolivia, 1 to 5½; the directors have declared a dividend of 2s. per share. Placerville, 2½ to 2½; Hultafall, 2 to 2½; Kapanga, 1½ to 1½; Colorado, 2½ to 3½; Eberhardt, 3½ to 3½; Flagstaff, 1½ to 1½; Emma, 3½ to 3½; La Plata, 1 15-16 to 2 1-16; Last Chance, 3½ to 1; New Quebrada, 6 to 6½; Nouveau Monde, 1½ to 1½; Panulicillo, 6 to 6½; Pestarena, 7s. to 9s.; Richmond, 16½ to 17; Ruby, 6½ to 6½; St. John del Rey, 240 to 260.

The Market for Mine Shares on the Stock Exchange has been in a thoroughly healthy and active condition throughout the week, and although in one or two exceptional cases the quotations are lower this evening than last Friday the general movement has been upward, and there is certainly no disposition to force sales. This is not surprising when it is considered that the tin standards were raised on Monday, and that both at the Swansea ticketing on Tuesday and at that at Redruth yesterday the advance in the copper standard—2l. 13s. 9d. at Swansea and 3l. 5s. in Cornwall—was sufficient to give many mines a good balance at the Bank upon a three months' working instead of leaving them just struggling to meet cost. At South Condurrow meeting a dividend of 10s. was declared, and in several other concerns in which the shareholders have met the financial prospect is decidedly cheering. The new companies formed for working home mines are reported to have been well received, although they have been unable to place their shares so rapidly as some of the Indian and other foreign gold mines. Devon Friendship, which closes its subscription list on Thursday, is said to have received sufficient applications to admit of selecting its shareholders, and Wheal Boys is progressing favourably. Altogether the prospects are encouraging, and promoters seem well disposed to take advantage of them. The Needlerock prospectus is published this week, and the Madras Gold Mining Company, which will work in the Mysore district, will invite the support of the public within the next few days.

Indian Gold Mine Shares continue in as great favour in the market as ever, and the transactions have been very numerous. The Needlerock Company, an offshoot of the South-East Wynaad, promises to become as great a success as its predecessors, the shares being already well applied for. The closing quotations are—Devala Moyar, 1½ to 2½ ex all; South Indian, 2 to 2½; Indian Glenrock, 1½ to 1½; Indian Phoenix, 1½ to 1½; South-East Wynaad, 1½ to 1½; Mysore Reefs, 1½ to 1½ prem.; Devala Provident, 1½ dis., par; Mysore, 1½ to 1½ prem.

The Needlerock Estate and Gold Mining Company, with a capital of 125,000l., in shares of 1l. each, has been formed to purchase for 85,000l. (of which 53,000l. is to be in cash, and the remainder in fully-paid shares) and work the Buckingham and Stone's reefs with about 250 acres of land, being part of the Needlerock estate held on lease by the South-East Wynaad Estates and Gold Mining Company. When this latter company was formed Mr. Oliver Pegler wrote with regard to Needlerock:—This estate has been considerably improved of late by new roads, thus making the application of machinery easy, and the general working of the various fields more profitable. The supply of timber is sufficient for all purposes; there are several streams that take their rise on this property, and great natural facilities exist whereby a large storage of water may be economically effected, and turned to good account for both mining and agricultural purposes. There are several magnificent and highly promising outcrops of auriferous quartz reefs on this estate, and in the underlie of which numerous old workings occur. It is probable that these outcrops belong to two principal veins, which are well known as the Chandos and Buckingham reefs. He has since reported that on the Needlerock estate, at the point near the boundary separat-



ing the two properties, we were successful in meeting with some rich quartz, in thin leaders, running through gneiss rock. Some of the specimens obtained were very rich. No doubt these veins strike from a strong reef, which outcrops close at hand. There is here a great extent of old workings, both quartz mining and alluvial washings. Captain Roberts, at present in charge of the mining works at this point, reports to the manager, under date Oct. 16, that the samples of stone tried during the week averaged  $\frac{1}{4}$  to  $\frac{1}{2}$  oz. of gold per ton, and that in some of them large quantities of native silver, in the proportion of from 50 to 100 ozs. per ton, had been also discovered. Messrs. Johnson, Matthey, and Co.'s assays fully confirm the favourable views entertained concerning the property. The company has secured both the surface and mining rights, which is a very important point, and these reefs can be at once worked without further prospecting. The perfect freedom to build stores, houses, and put up machinery, besides having spots for the deposit of the debris of the workings, are great advantages. The prospectus will be found in another column.

Devon Great Consols, 17 to 18; and have been in good demand all the week, and appear very scarce. The month's sampling of copper ore is 900 tons.

Devon Great United, 2 $\frac{1}{2}$  to 2 $\frac{3}{4}$ ; rapid progress is being made, and water is now out of the bottom of one of the shafts. Good indications appear in the 20 cross-cut.

South Wheal Frances shares have advanced to 12, 13, and mines said to have improved in the bottom levels.

Mona, 15 to 15 $\frac{1}{2}$ . The end going east of the 70 is still very rich, and the tribute pitches are turning out a good quantity of ore; two of them have considerably improved during the last few days. Other parts of the mine unchanged.

East Long Rake, 1 to 1 $\frac{1}{2}$ ; these shares are reported firm, and are said to be well held. From the special report, by Capt. Wm. Francis, it appears that the mine has every probability of achieving a great success when the Gin lode is cut.

The Secretary of the South Indian Gold Mining Company (Limited) informs us that under instructions from the board average samples of quartz have been taken from tunnel No. 1 at 170 ft. below the surface, and No. 2 reef at 80 ft., and sent to the Bombay Mint for assay. The agent of the company has just telegraphed that the average of nine assays was 1 $\frac{1}{2}$  oz. per ton.

Messrs. Henry Bentley and Co. (Limited) held their second general meeting at the registered offices of the company, at Woodlesford, on Jan. 6, when a dividend at the rate of 10 per cent. per annum was declared for the half-year ending Sept. 30 last. The share list is now closed.

The London and Staffordshire Fire Insurance Company notify that Mr. Patrick Comrie Leckie, of Messrs. Durant and Co., has joined their board.

The Standard Bank of London letters of allotment were posted on Wednesday.

The Nouveau Monde Gold Mining Company have received a telegram from one of the directors, now at Trinidad, to the effect that the purchase and transfer of the Nacupai Mines has been completed, and that they have taken possession, and also that the title deeds have been lodged in the Bank.

The Rico Silver Mining Company are offering their \$10 working capital shares at 1 $\frac{1}{2}$  per share in blocks of 50 shares, or multiples thereof; the certificate to be registered and non-transferable until the company has paid its first dividend, after which time the non-transferable certificate may be surrendered, and a transferable certificate issued in lieu thereof. Dividends will be payable in Chicago or in London at the option of each shareholder. The company is well known to the readers of the *Mining Journal*, and is mentioned by a correspondent in a communication inserted to-day.

St. John del Rey, 240 to 260, the price is said to be sustained entirely by market operations; it is to be hoped that outside capitalists purchasing may not have subsequent cause for regret. A letter from the district appears in another column.

Hungarian Copper, 1 $\frac{1}{2}$  to 1 $\frac{3}{4}$ ; in reply to numerous applications for shares in the Hungarian Copper Company, the directors beg to state that all shares were subscribed for and allotted some time since.

Sentein Silver-Lead, 1 $\frac{1}{2}$  to 2 $\frac{1}{2}$ ; it is reported that the London management of this company is about to be removed to the offices of Messrs. John Taylor and Sons, of Queen-street Place. If this be true it will be another addition to the long list of dividend-paying mines to which they are secretaries.

Richmond, 16 to 16 $\frac{1}{2}$ ; the usual telegram from the mines at Eureka, Nevada, states that the week's run was \$55,000, from 860 tons of ore. During the week the refinery produced ore bars to the value of \$40,000. The manager (Dec. 16) reports that the 800 north-west, on fissure, has been extended 11 ft.; the fissure is still regular and well defined. The 800 south, on quartzite, has been advanced 27 ft., with very favourable indications for ore. The 800 north, on line, has been extended 20 ft. in fair looking ground. The 900 winze has been sunk 11 ft.; now down a total depth of 62 ft., with favourable ground for ore in the bottom. No. 15 chamber is looking well, especially in the eastern end, where the developments are better than we expected. No. 13 chamber is also looking better in the south end. No. 14 is looking very well, and shows as much ore at present as it has for some time past. No. 16 chamber, below the 200, is opening out to quite a good-sized body of ore. The ore in the 700, although not as yet developed into a large chamber, is looking very promising. Taking the mine on the whole, there is a decided improvement; the ore reserves have rather increased than diminished. The furnaces are running well, and smelting the average quantity of ore.

Ruby and Dunderberg, 6 $\frac{1}{2}$  to 6 $\frac{3}{4}$ ; one furnace in two weeks has yielded \$23,000. Two samples from the Bullwhacker Mine assayed 58 per cent. of lead with 110 ozs. of silver to the ton, and 33 per cent. of lead with 17 ozs. of silver to the ton respectively. In El Dorado a good strike of ore is reported, one specimen yielding 15 ozs. of gold and 49 ozs. of silver to the ton. The property is more fully referred to in another column.

Missouri, 10 $\frac{1}{2}$  to 11; advices received this week, dated Dec. 16, state that at St. Clair shaft the 315 north has been driven 15 ft.; the ground at present is worth for ore  $\frac{1}{2}$  ton per fathom. Five fathoms of ground have been stoped in the 315 south, yielding 1 ton of ore per fathom. A stop has been started north from the winze, and is producing 2 $\frac{1}{2}$  tons per fathom of block mineral. In the 315 north (front stop) 2 $\frac{1}{2}$  fathoms have been stoped, yielding  $\frac{1}{4}$  ton per fathom. In the 245 north 11 fathoms of ground have been stoped, producing 2 tons per fathom, 4 $\frac{1}{2}$  fathoms of ground broken in front stop, and 6 $\frac{1}{2}$  fathoms broken in the back stop. Old engine-shaft is completed to a depth of 280 ft., and unwatered to a depth of 275 ft. From this point a short level driven only 8 ft. has been met with; the lode in the end of the level shows 9 in. in width. We shall commence with the new dressing machinery on the 20th inst.

In Lead Mine Shares there has been more business doing than for some weeks past, but no material rise in the quotations has taken place. The prospects of the lead trade are considered good, and hence there is increasing confidence in the shares of mines producing that metal.

Tankerville Great Consols,  $\frac{1}{2}$  to  $\frac{1}{4}$  prem.; as will be seen by the manager's report in another column, the mines are looking well, and good progress is being made throughout.

Van, 15 to 16; the usual monthly report will be found in another column. The mine looks very well in the bottom levels. The sale on Thursday, 200 tons of lead and 100 tons blende, realised 2250 $\frac{1}{2}$ .

Gwern-y-Mynydd, 2 $\frac{1}{2}$  to 3; the workings at Deborah have been delayed during the week by heavy rains, but the ground maintains the same favourable indications as before reported. North and Treasure shaft will be resumed directly the main flues are in order.

The movements in the General Markets are thus reported upon by a reliable member of the Stock Exchange:—

Adverse influences have checked the advance in General Markets during the past few days, and prices early in the past week were rather inclined to fall. To-day, however, the spirited action of the French Government in the rather dangerous Greek Question, and the news that the Turks show signs of yielding, together with a favourable interpretation of the Queen's Speech, and the brighter weather, have induced a much better tone, and the feeling as we write is that we are on the eve of a general rise in prices.

The money market is less stringent, the New York Exchange is above danger point, and although a slight hardening is to be expected as a natural result of the slow, but sure, improvement in trade, at present there are no signs of much dearer money. Consols are well maintained at 98 $\frac{1}{2}$  to 99 for the February account, and 98 $\frac{1}{2}$  to 99 $\frac{1}{2}$  for money.

Foreign stocks have fluctuated a little. The great feature in this department, however, has been the sharp advance in the loans of Mexico. This is due, we hear, to large purchases on the part of New York houses, and a statement that these bonds are to be quoted on the New York Stock Exchange. Egyptian stocks remain very firm, and meet with considerable investment buying from the English public. Argentine issues at present are featureless, but the news from this country continues of a highly encouraging description, and the Hard Dollar Bonds at 73 are just now much sought after by investors, as they are relatively far below their proper value.

Great activity has prevailed in foreign railways. Lombardo-Venetian shares

have been much bought by operators here upon the wonderful increase in the traffic returns, which, should they continue, will soon be sufficient to pay 5 per cent. once more on the ordinary shares, which are quoted at 9 for the 20 $\frac{1}{2}$  share, a price at least 5 $\frac{1}{2}$  below their intrinsic value. East Argentine shares, which carry about 5 $\frac{1}{2}$  10s. per share of arrears of interest, guaranteed by the Argentine Government, are well supported, and the buyers, who are reported to be exceptionally well informed, express their confidence in ultimately being paid their dues in full. Varna shares and obligations have nearly doubled in value within the past two months, and it is rumoured that the obligations are to be paid off altogether, and that the shares only will remain. Whatever the scheme may be the buying may be described as of a frantic nature, and would appear well founded.

Native Guano shares have again risen. The parties interested proclaim that it is only a question of time for the system of this company to be generally accepted as the best; price 6 $\frac{1}{2}$  to 6 $\frac{3}{4}$ .

Grand Trunk securities are stated to be gradually passing into the hands of investors, and keep very firm. St. John and Maine 100 $\frac{1}{2}$  shares are quoted at 50 to 51. Should the Grand Trunk Company buy this company the price would be nearer par, and we are told that this end is really not far off, and is most desirable in the interest of both companies.

English railways, with one or two exceptions, exhibit remarkable strength. The dealers profess great anxiety still at what they say is a weak "bull" account, and point to the rates of continuation they exacted at the end of the last carrying-over day as a proof of the rotten state of the market. This line of argument, however, is altogether fallacious, as the bulk of the account was continued at the lower rates current in the early part of the contango-day, and it is well known that parties who leave their continuation business until late in the day do so at their own peril, and are quite at the mercy of the dealers. Of course it is not to be denied that rates were stiffer, but that these rates were altogether exceptional can not be gainsaid. Sheffield, A. stock has been sold by some of the tired holders under the influence of a bad traffic return, and Brighton, A's, are lower upon the persistent circulation of pessimist rumours and heavy sales.

At Redruth Tackling, on Thursday, 1114 tons of ore of 6 $\frac{1}{2}$  average produce, and containing 69 tons 18 cwt. of fine copper, were sold for 3812 $\frac{1}{2}$  18s., being 3 $\frac{1}{2}$  8s. 6d. per ton of ore; 10s. 11d. per unit, or 54 $\frac{1}{2}$  11s. per ton of fine copper in the ore, and an average standard of 98 $\frac{1}{2}$  7s. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Dec. 23.	2302	...	...	...	...	...
Jan. 6.	1113	...	...	...	...	...

Compared with the last sale the advance has been in the standard 3 $\frac{1}{2}$  5s., and in the price per ton of ore about 4s. 1d.

At Swansea Tackling, on Tuesday, 1783 tons of ore of 7 $\frac{1}{2}$  average produce, and containing 136 tons 8 cwt. of fine copper, were sold for 7973 $\frac{1}{2}$  10s., being 4 $\frac{1}{2}$  9s. 5d. per ton of ore, 11s. 8 $\frac{1}{2}$ d. per unit, or 58 $\frac{1}{2}$  9s. per ton of fine copper in the ore, and an average standard of 84 $\frac{1}{2}$  16s. 9d. for 9 per cent. produce. Subjoined are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Dec. 7.	1536	...	...	...	...	...
Jan. 4.	1783	...	...	...	...	...

Compared with the last sale, the advance has been in the standard 2 $\frac{1}{2}$  13s. 9d., and in the price per ton of ore about 4s. 1d. There will be no sale on Jan. 18.

**GAS SHARES.**—The principal business in these shares, according to this evening's report of Mr. W. L. Wynn, of the Stock Exchange and Finch-lane, has been in Bombay, 5 $\frac{1}{2}$ ; British, 3 $\frac{1}{2}$  to 3 $\frac{3}{4}$ ; Commercial, 186 to 186 $\frac{1}{2}$ ; ditto new, 144 $\frac{1}{2}$ ; ditto 4 $\frac{1}{2}$  debentures, 107; Continental Union, 20; European, 193 $\frac{1}{2}$  to 194; ditto new, 13; Gaslight, A. 176 to 181; ditto, C. preference, 212 to 213; ditto, D. preference, 212 to 213; ditto, H. 7 per cent., 134 $\frac{1}{2}$  to 135 $\frac{1}{2}$ ; ditto, 4 per cent. debentures, 101 $\frac{1}{2}$ ; Imperial Continental, 186 $\frac{1}{2}$  to 187; Malta and Mediterranean, 2 $\frac{1}{2}$ ; Monte Video, 17; Oriental, 7; Rio de Janeiro, 24 $\frac{1}{2}$  to 25; South Metropolitan, A. 204; ditto, B. 179. Gas stocks good. For closing prices see list on last page of Journal.

**INSURANCE SHARES.**—According to this evening's report of Mr. W. L. Wynn, of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance, British and Foreign, 38; ditto Marine, 28 $\frac{1}{2}$ ; Commercial Union, 25 $\frac{1}{2}$  to 25 $\frac{3}{4}$ ; Home and Colonial, 1 $\frac{1}{2}$  to 2; Fire, 3 $\frac{1}{2}$ ; Indemnity, 108; Lion Fire, 21 $\frac{1}{2}$ ; ditto Life, 2; London, 65 to 65 $\frac{1}{2}$ ; Rock, 8 $\frac{1}{2}$  to 8 $\frac{3}{4}$ ; North British and Mercantile, 64; Railway Passengers, 7 $\frac{1}{2}$  to 7 $\frac{3}{4}$ ; Phoenix, 308 to 309 $\frac{1}{2}$ ; Royal Exchange, 409 $\frac{1}{2}$  to 412; Queen, 4 $\frac{1}{2}$ ; Ocean, 4 $\frac{1}{2}$  to 8 $\frac{1}{2}$ ; Sun Life, 8 $\frac{1}{2}$ ; Universal Marine, 39 $\frac{1}{2}$  to 40. Insurance shares firm. For closing prices see list on last page of Journal.

**TRAMWAYS.**—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

The Frontino and Bolivia Gold Mining Company have declared a dividend of 2s. per share.

The prospectus of the Needlerock Estate and Gold Mining Company is issued. The capital is 125,000 $\frac{1}{2}$ , in 1 $\frac{1}{2}$  shares.

The Callao "Bis" Gold Mining Company (Limited) announce that the following telegram from Mr. George Atwood, the company's consulting engineer, has been received:—"Trinidad: I leave by the cargo boat Avon, and expect to arrive at Havre on Jan. 20. Vein good. Quarantine here."

## UNUSUALLY GOOD INVESTMENT.

[Communicated by Mr. MURCHISON, of Austinfriars.]

In the parish of Gwinear, Cornwall, there is a valuable little Tin Mine, named

### PARBOLA,

which differs from most of the other mines in the county, the tin being found not in a lode, but in an elvan course. This elvan course is 70 ft. wide, and the tin is in branches, which extend across it from side to side, these branches varying in thickness from 8 in. to the finest threads, and are almost pure black tin. By extending levels east and west they are invariably met with in groups at intervals, sometimes of only a few feet, and at others of several fathoms. Throughout the length of the sett there are a great many of these groups of tin branches; but the most important of all hitherto worked are those which traverse the elvan course on each side of the cross-course, situate in the centre of the sett, and a little to the west of the engine-shaft. This cluster of tin branches are thousands in number, and are generally rich in quality. It is believed that this elvan has supplied tin in large and small quantities at periods over hundreds of years, and yet the greatest depth wrought does not exceed 35 fathoms.

In a month or two it is expected that, with the present price of tin, the returns will more than pay cost; but with an advance in the price of the metal (which is generally expected to rise considerably during the present year), and should a new discovery be made, substantial profits would be at once realised. The shaft will be sunk deeper and the levels will be extended, and so exceedingly and unusually cheap can the mine be worked that it will take only about three months to reach another level (10 fms. deeper), and the driving can be done at 10s. to 60s. per fathom. As one of the most experienced mine agents in Cornwall states, "it is one of the cheapest mines to work that I have ever known." There is little water, the ground does not require much timber, and the natural state of the tin is so free from impurities that it requires no calcining, therefore it is easily and quickly prepared for market.

There are on the mine a 40 in. pumping-engine and boiler, 30 fms. of 12 in. pitwork, five horse-whims, a dry, tram wagons and roads, horizontal stamping-engine, 16 heads of stamps, and dressing-floors complete, with the usual and necessary outfit and plant of a working mine.

The mine will be conducted on the Cost-book System, and is in 6000 shares, which are being issued at 1 $\frac{1}{2}$  each, out of which 4000 $\frac{1}{2}$  will be given for the

### MINE, MACHINERY, AND PLANT,

leaving 2000 $\frac{1}{2}$  for working capital, which is considered ample to bring the mine into a good dividend state—so that any further call is unlikely. The affairs will be managed by a committee of three large shareholders, two of whom are well-known men of business resident in the locality; and the operations will be under the management of Capt. W. R. Rutter, of the famous West Seton Mine.

A large number of the shares is already taken (including 1000 subscribed for by two influential firms in Cornwall), and I am prepared to receive applications for the remainder. As the demand is likely to be considerable, and the number of shares left is limited, intending investors should apply at once, as the allotments will be made according to rotation.

The above statements are taken principally from a report just made up by Captain Rutter (copies of which, with prospectuses, I can supply), and I have no doubt that

### PARBOLA

will be one of the earliest and most valuable prizes of 1881, which it is generally believed will bring with it a great improvement in trade and industry generally. At all events, at 1 $\frac{1}{2}$  per share (6000 $\frac{1}{2}$ ), a property with such early prospects of great success, and so well

found with machinery and all necessary plant, must be considered exceedingly cheap, giving a margin for a large advance in price.  
S. Austinfriars, London, Jan. 6. J. H. MURCHISON.

**BRAZILIAN GOLD.**—This company has secured the services of Mr. F. Geach as manager-in-chief. Mr. Geach has had a life-long experience in all departments of mining in different parts of the world, and possesses every qualification indispensable to the adequate discharge of duties involving honourable trust and general administration. He left Liverpool a few days since, accompanied by a select staff of English miners and artisans. His report upon a property from which so much is expected is awaited with interest.

**GREAT CONSOLS.**—It is understood that the prospectus of this important undertaking will be published during the ensuing week, and judging from the interest which has been already evinced in it, and the desire to participate in the allotment of shares at par, it is considered probable that with the advancing price of tin they will soon be sought after at a premium, therefore the advantage will be to those who are first in the field.

## CAPPER PASS AND SON, BRISTOL,

ARE BUYERS OF

LEAD ASHES SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c and DROSS or ORES containing COPPER, LEAD, AND ANTIMONY.

MR. GEORGE K. NORTH, CHARTERED ACCOUNTANT, 32, WALBROOK, LONDON, E.C.

THE COMPANY OF CORNISH TIN STREAMERS (LIMITED).  
THE WEST OF ENGLAND IRON ORE COMPANY (LIMITED).  
THE FAL VALLEY CHINA CLAY COMPANY (LIMITED).  
THE ROCKS TIN MINING COMPANY (LIMITED).

THOMAS B. LAWS, STOCK AND SHARE DEALER, AND MINE ACCOUNTANT, 2, CHURCH COURT, CLEMENTS LANE, LONDON.

MR. F. REED WILSON, DEALER IN STOCKS AND SHARES, 30, FINCHBURY CIRCUIS, E.C.

Mr. Wilson begs to direct attention to the fact that he has, at the instance of numerous correspondents, opened an agency for the purchase and sale of Stocks and Shares.

Mr. Wilson has had a life-long initiation into the mysteries of British and Foreign Mines, both as a large holder of shares and manager of companies, and he thinks he is qualified by long and dear experience to give sound and honest advice as to investments in such securities.

All transactions must be for cash, or fortnightly settlement, and speculative bargains in mining shares will not be entertained without substantial cover. Mr. Wilson subjoins a list of mines with whose intrinsic or prospective merits he is intimately acquainted.

East Crebor.	North Herodsfoot.
East Van.	Parys Copper Corporation.
Derwent.	Roman Gravels.
Leadhills.	South Caradon.
Lead Era.	Wheal Basset.
Morfa Du.	Wheal Grenville.
Brazilian Gold.	Frontino and Bolivia.
Colombian Hydraulic.	Richmond.
Consolidated.	Ruby.
Devala Moyer.	South East Wynaad.
Emma.	South Indian.
Callao Bis.	

The following Shares are strongly recommended for a rise:—North Herodsfoot, Wheal Basset, La Plata, Nouveau Monde, West Caradon, Consolidated, Parys Copper, Morfa Du, and Roman Gravels, in all of which Mr. Wilson has special business.

MESSRS. KENDALL AND CO.,

PRACTICAL AND CONSULTING MINING ENGINEERS,

WEST OF ENGLAND MINING EXCHANGE, ST. AUSTELL, CORNWALL.

TO CAPITALISTS AND INVESTORS. KENDALL AND CO. having had over 30 Years' Practical Experience in MINING in all its various branches, and being daily associated with the various operations of Mines in Cornwall, are enabled to speak with authority as to the position and prospects of Mines. Their advice will be found most valuable, as well as to those who have already invested, and to intending investors.

Particulars of Mining and other Shares which are certain to rise cent. per cent. in a short time on application.

KENDALL AND CO.'S Special Circular should be read by all investors with thoughtful care.

ABBOTT, SOUND INVESTMENTS.

PAGE, THE STANDARD BANK OF LONDON

AND CO., (LIMITED).

The Shares in this Bank, now offered, will prove a lucrative and safe investment, and will command a high premium.

Prospectus and full particulars sent post free on application.

INVESTORS seeking Sound and Lucrative Securities should apply for our MONTHLY and WEEKLY LISTS, containing SELECTED INVESTMENTS that are paying from 5 to 10 per cent., and are as safe as Railway Debentures.

CONSOLS, RAILWAYS, FOREIGN, and other STOCKS dealt in at CLOSE PRICES.

STOCKS AND SHARES.

FOREIGN BONDS, RAILWAYS, TRAMWAYS, GAS, INSURANCE

IRON, COAL, AND MISCELLANEOUS SHARES.

Prices, with reliable information, forwarded on application to—

MESSRS. H. R. LEWIS AND CO., BARTHOLOMEW HOUSE, BARTHOLOMEW LANE, LONDON, E.C.

SPECIAL INFORMATION in the SELECTION of MINING SECURITIES.

The "MONTHLY INVESTMENT LIST" and the "WEEKLY PRICE LIST" may be had on application.

WHEAL HONY AND TRELAUNY UNITED SILVER-LEAD MINING COMPANY (LIMITED), MENHENIOT.

We strongly advise the purchase of these £2 shares at from 2 $\frac{1}{2}$  to 3, as being of the safest, most certain of dividends, and cheapest Mining Investment of the day. The work at the mine is progressing with gigantic strides, and the company will be a dividend paying one in 1881 and shares rise to £6. The Old Tre-launwy £15 shares sold for £300.

Mr. JAMES PEARCE, of Tavistock, at the laying of foundation stone of engine house, said:—"This mine is an exceptional property, the company were not working in the dark. The property had been proved at each end, and they could almost get at the value by measurement; consequently it was not a speculation, it was nothing but an investment."

Mr. MICHAEL W. BAWDEN, of Liskeard, stated: "that there was no speculation or uncertainty about their finding ore of a first-rate quality. One ton of Wheal Trelawny ore was equal to 1 $\frac{1}{2}$  ton of any other lead mine in Cornwall, and equal to 2 tons of Welsh ore." Full particulars post free. 100 shares or part at £2 $\frac{1}{2}$ .

THE RARA FORTUNA SILVER MINE is situate in the Province of CORDOBA, in the ARGENTINE REPUBLIC.

We have seen samples of very rich ore from the lode—a true fissure vein in the porphyritic formation. The average of silver is 250 ozs. to the ton, and the profit, as at present worked, is £10,000 per annum. An influential company is being formed.

OFFICES, 5, AUSTIN FRIARS.—SECRETARY: Mr. J. VINCENT BARBER.

Capital £50,000, and we advise an immediate application for shares. On issue of the prospectus a great part of the capital has been already subscribed. The company intend working the mine with the most approved appliances, and we have no doubt but that the returns can be trebled. Messrs. Mocatia and Goldsmid have been selling the production and sale notes, and also copies of assays by Messrs. Johnson, Matthey, and Co. can be seen at the offices.

**GOLD MINES.—WHAT TO BUY. WHAT TO AVOID.** Full and most reliable information on Gold, Silver, Copper, Tin, and Lead Mining Shares, as an investment or speculation.

H. R. LEWIS AND CO'S.

Monthly Investment List gives the fullest information on stocks and shares. Highest and lowest prices, dividends and railway traffic returns, and information useful to all investors.

BARTHOLOMEW HOUSE, BARTHOLOMEW LANE, LONDON, E.C.



## ANGLO-AMERICAN MINING.

**RICO SILVER MINING COMPANY OF COLORADO** (LIMITED LIABILITY), CHICAGO, U.S., carefully managed at small expense. Profits of from 50 to 100 per cent. per annum are anticipated.

The George Mine, with other property belonging to the company, is situated at Rico, in a district containing rich and easily-worked silver and gold mines, at an altitude of 8000 ft. above sea-level, where the mountain sides are covered with spruce, fir, and pine trees, and where work can be carried on in winter to good advantage.

Rico is in that part of Colorado known as the "Silver San Juan"—a mining region now being opened up by the Denver and Rio Grande Railroad.

At Durango—the future city of the San Juan and central terminus of the Denver and Rio Grande Railroad, from whence branches will radiate to Silverton, Rico, and other points—extensive smelting, reduction, and refining works are now in course of construction. Durango will thus become a convenient and a competing market for ores from all surrounding mines.

The directors of the Rico Silver Mining Company offer for sale, on most favourable terms, fully-paid working capital shares of the company. Money derived from the sale of shares is employed in opening up and working mines owned by the company, also in purchasing mines from prospectors and locators at cash prices, and in developing the mines so purchased.

The acquisition in this manner of mines from first hands at cash rates, instead of from speculators at absurdly high figures, is the mode of procedure practised by private capitalists in Colorado, though not usual with mining companies, and will commend itself at once to every business man's understanding, as the only way to realise that immense percentage of profit so often made from Colorado mines by legitimate honest mining.

For prospectus and information, write to J. J. WEST, 245, Wabash Avenue, Chicago, U.S.

## MONEY AND MINING.

**IT IS WELL TO LOOK BEFORE YOU LEAP.** Anyone who thinks of putting money into Mining can, by writing to me, have sent, post free to his address, a CIRCULAR, which will give him valuable information, Points of Financial Utility, and Practical Views regarding Mining Investments generally, considered from a business standpoint.

J. J. WEST, 245, WABASH AVENUE, CHICAGO, U.S.

Extracts from J. J. WEST'S Circular on Mining Investments:—

With an occasional exception, such as the Richmond Consolidated, which pays dividends of from 40 to 50 per cent. per annum, English capital invested in America has not paid.

Excessive capitalisation, mines stocked for millions of dollars, or hundreds of thousands of pounds, want of due oversight and proper economy in working and managerial expenses, incompetent or dishonest management have, by far, more often caused loss of money to English and American investors than a failure or lack of richness in the mines.

In Colorado a new order of things as regards mining is coming into vogue: business men are conducting mining operations on business principles, making money out of the ores extracted from the earth. Railroads are penetrating into the heart of hitherto inaccessible districts rich in mineral wealth.

Let English investors try this new order of things; let them try placing their money in the richest known mineral district in the world, a little in advance of the railroad, while property is still cheap.

The Rico Silver Mining Company offers them the opportunity of sharing in the great profits to be made, by purchasing silver and gold mines from actual prospectors and locators, and judiciously and economically developing and working the mines so purchased.

What the MINING JOURNAL says, Dec. 4, 1880:—

"ANGLO-AMERICAN MINING."—In another column will be found an interesting communication from Mr. J. J. WEST, of Chicago, combatting the view taken by some correspondents of the Journal that British mining is more remunerative to capitalists, and pointing out the enormous field for enterprise which is presented by the State of Colorado, and especially the San Juan, Rico, and Dolores district, the richness of which is evidenced by their building 200 miles of railway over a mountainous and difficult country for the purpose of developing it; indeed, it is acknowledged that they will open to the world a mining district unparalleled in history. There can be no doubt that this portion of the State is developing rapidly, and with the opening up of railways the extension will be enormous."

## Notices to Correspondents.

**TITLE-PAGE AND INDEX.**—With next week's Journal the TITLE and INDEX will be published, together with some interesting statistical and other matter unavoidably crowded out.

**CORRESPONDENCE.**—All business letters should be addressed to "THE EDITOR," and not to individuals. Private letters, except for the Proprietors, should not be sent to the office at all, as it must be distinctly understood that all letters received are, however they may be addressed, regarded as connected with the business, and opened accordingly.

**REPLIES.**—"N. N."—Correspondents replying to letters should avoid the practice of repeating the statements to which they reply, as it unnecessarily lengthens their letters to an extent which often compels delay or rejection owing to the large demands upon our space.

**AVIS IMPORTANT—AUX ABONNES ETRANGERS DU "MINING JOURNAL."**—Le prix de l'abonnement au Mining Journal pour tous les pays de la CONVENTION POSTALE INTERNATIONALE est de 35 frs. le port compris. L'abonnement est payable par anticipation, ou par mandat postal international ou par autre mandat sur Londres. Le montant, si l'on le veut, sera touché à domicile à la fin de l'an, mais en ce cas nous tirons à vue, sans avis, et sur le dos de la note. L'abonnement continuera sans avis contraire.

**SHARE DEALING.**—"W. F." (Gloucester).—No dispute is likely to arise in the matter. The contract being signed on Nov. 30 to deliver 20 shares at end of February, the buyer will receive whatever those 20 shares have been converted into between the dates. If the reconstituted company be in 12,288 shares "W. F." will receive 40 instead of 20 upon payment of the balance or difference. The purchaser is absolute owner of the shares from Nov. 30, and purchases them as they existed at that date. The date of delivery makes no difference.

**IMPORTANT TO INVESTORS—HUNGARIAN GOLD.**—Some time since I applied for shares in the Hungarian State Gold Mining Company, and enclosed application and allotment money. On Nov. 8 I received a post-card asking for a return of receipts when stamps would be remitted. I have written twice since returning same, enclosing a stamped and directed envelope, and asking for cash, but have had no reply. Can any correspondent give me any information as to what I should do for obtaining same?—SPECTATOR.

**EAST WHARF ELLEN—BANKERS AND SHARE APPLICATIONS.**—"J. C." (Widnes).—There can be no question that the promoters of companies should obtain the authorisation of the bankers before advertising that the said bankers will receive applications for shares. Mr. Charles Tweedy, manager of the Cornish Bank, writes that the letter of "J. C." "addressed to our Truro branch, has been forwarded here, as Mr. Chas. Bowden has a small account with us. In reply we would say that we were not aware of any such advertisement having appeared, that we have had no account opened with us in the name of East Wharf Ellen Mine (Limited), and that we held no money for the use of any such company. The reckless method of stopping all further discussion would be for the promoters to return all deposits in full, and without delay.

**NORTH BRITISH MINING INSTITUTE.**—Can any correspondent oblige me with the address of the secretary or any officer of the North British Mining Institute, or the locale of the institution?—W. B.

**COMSTOCK MINES.**—"B. J." (Paris).—The mere fact of a mine being on the Comstock lode or in the Comstock district cannot be taken as any guide as to its value. There are as many good and profitable mines in other districts, and as many worthless mines in the Comstock district as elsewhere. The Confidence, California, and Virginia Consolidated are said to be only mines on the Comstock lode which have paid expenses in 1880 without making a call. The same authority, quite a reliable one, which gives this information states that the Comstock mines in 20 years have yielded 55,000,000 lbs. worth of bullion; raised to surface 1,750,000,000 tons of water, and 160,000,000 tons of waste rock; but that while the 29 leading Comstock mines have called up 1,362,560 £ in the year, the dividends paid have been but 123,160 £, and this has been paid by two companies only, the other 27 being blanks. It is very truly remarked that the mines in many of the most popular mining districts do not pay until properly developed, and in many, very many, well advertised mining enterprises dividends are not forthcoming.

**ANTIDOTES TO ARSENIC.**—"W. P." (Tavistock).—Several prominent notices have recently appeared in the Anglo-American Mining Journal. Dr. McCaw, a Canadian physician, recommends a teaspoonful of tepid water with one drachm of tincture of chloride of iron and one drachm of bicarbonate of soda or potash well stirred into it. It is said to be a sure antidote, and is sure to be obtainable at the nearest chemist's.

**COST BOOK AND LIMITED LIABILITY.**—"H. C." (Glasgow).—Promotion money is taken in cost-book concerns to the same extent as in limited liability companies, although by a different process. In limited liability companies the amount taken is stated in the prospectus. In cost-book concerns the promoters take the whole of the shares, call them, for example, 5s. paid (which represents 250 £ working capital for 1000 shares in the company) and fix the price of the shares at, perhaps, 1 £ 5s. per share, which gives the promoters 1000 £ purchase money for each 250 £ working capital subscribed. The figures, of course, vary.

**NEW PENROSE.**—As there is little heard of this mine, would you allow me to ask, through the Journal, if any readers would give information as to the steps, if any, the directors are taking for the speedy production of its mineral wealth? Such information would be fully appreciated I believe by the body of shareholders.—A SHAREHOLDER.

**MINING AS A BUSINESS.**—"Disappointed" (Chelmsford).—When pursued with energy and judgement there is, perhaps, no business more profitable than mining; but whilst the surgeon would laugh at a miner for attempting to amputate a limb or reduce a dislocation without previous instruction, that same surgeon would go into mining as a business, and decline to pay sixpence for preliminary instruction. You admit having made some profit, and, therefore, should not be "Disappointed." The Americans put it thus:—In mining, as in all enterprises, capital is required; and while there may be localities where the mining industry has not yielded a profit, the cause should be looked for before condemning the business. Wheat and corn do not yield a profitable crop in the Lake Superior copper regions, and an investment in copper stock would certainly be preferable. To condemn farming because corn will not

grow upon a mineral belt is quite as sensible as to condemn the mining industry because a nugget of gold is not glistening upon the rose-bush.

**TAXING.**—"W. J. A. D." (Glasgow).—The details of the invention are not yet obtainable, the patent only having been applied for in October. The matter is further mentioned elsewhere.

**STEAM ON TRAMWAYS.**—"C. J. B." (Brighton).—Steam traction on tramways has been used in this country although it is not in use in London. They have, moreover, just adopted it at Wolverhampton. The engine is made by Hughes, of Loughborough. All the works, with the exception of the necessary levers, gauges, &c., are entirely covered in, and neither is any fire seen from the outside, the only indication of steam being a filmy issue from the mouth of a very narrow funnel protruding through the top of the car in the centre. The driver is sheltered from the weather, but he has a first-class out-look, and the engine is so constructed that instead of a turn-table being required to reverse it for a return journey, the driver has simply to change ends, a duplicate working apparatus being provided which does away with the necessity of a turntable. Of course, a change of position with respect to a car can easily be effected by a shunting operation over points.

**PIG LEAD.**—"Galena."—The price of W.B. lead is invariably quoted at 10s. to 25s. above that for common English pig. Some years ago the W.B. lead was the favourite brand in the China market, and realised considerably better prices than other brands, but owing to the reduced value of lead the sellers of this particular brand are now reluctant to effect sales, and quotations are consequently quite nominal. The demand for W.B. lead for shipment to China has of late almost subsided on account of the owners of this brand having reduced the size of their pigs from 1½ to 1 cwt., the latter not suiting the Chinese market, although they are now again willing to make 1½ cwt. pigs.

**Received.**—"G. M." (Richmond): Replied to by post—"J. B." (New York): The matter has been duly noted—"J. J. W." (Chicago): Would you oblige by stating in what cases, since the Revised Code has been in force, decisions have been given permitting the owners of a patented claim to work into their neighbours' property either outside the end lines or side lines—"A. P. P." (Cousin Jan's Chat): Crowded out this week. You have put both pseudonym and signature to the MS.; which shall appear—"J. R. P." (Ouro Preto): Thanks. Enquire at Post Office as to missing Journals—"J. C." (Widnes): Fully attended to—"F. C." (Rossa Grande): Next week—"F. A." (Weirs and Sluices): Ditto—"M. B." (Tavistock): The matter could only appear as an advertisement—"G. S." (Lovell): Next week.

THE MINING JOURNAL,  
Railway and Commercial Gazette.

LONDON, JANUARY 8, 1881.

## COLLIERY EXPLOSIONS.

It is a healthy sign for the future safety of our working miners to see our mining engineers bestirring themselves more than they have hitherto done to devise means for the prevention of explosions in collieries, by which, during last year, 473 lives were lost in England and Wales. The explosions which have taken place on a large scale may be assumed to have resulted from defective or inadequate ventilation. Although this may not always have been the case, for experience has shown that as mining operations are carried on at considerable distances from the outcrops of the coal measures, and at greater depths from the surface, all the difficulties and dangers connected with explosive gas become intensely increased. Then there are sudden outbursts of gas by which a mine may be suddenly inundated, paralysing for a time all the power of the most active ventilation, so making the working places dangerous to an extent that cannot be exaggerated. To prevent explosions from such causes various expedients have been of late brought under the notice of the public, and in nearly every instance by those who have no practical knowledge of the working of mines, so that it has been found impossible to carry out their well-intended views. In the Supplement to last week's Journal there was a letter of a practical character from our esteemed correspondent, Mr. W. T. MULVANY, who has had great experience as a mining engineer. We certainly agree with him that the greater number of colliery explosions are really preventable. That dividing a colliery into separate districts with separate ventilation is certainly a safe system, and has long been advocated by Mr. DICKINSON, the chief Government Inspector of Mines in this country. This could be effected without much difficulty in new mines, but it would be different as regards those that have been long and extensively worked. More shafts has been the cry of the miners and their leaders for many years past, as they would of course ensure greater safety, and so also would bore-holes, for it is well understood that the ventilation of a mine becomes easier as the apertures to the open air are more numerous, for when they are near to each other and the roads, &c., have sufficiently large areas, the resistance becomes small, and the ventilation natural and sufficient. Not so very long since, however, many mines had but one shaft, for it was only in 1862 that the Duplicate Shafts Act was passed, and which has turned out most beneficial. In the three years preceding the passing of that Act there were 3178 deaths from colliery accidents throughout the kingdom, the quantity of coal raised having been 264,358,164 tons, whereas during the three succeeding years after the Act was passed there were 286,853,443 tons of coal raised, and if the number of deaths had increased at the same rate as the coal had in quantity the number would have been 3348.4, whereas the number of persons killed was only 2758, being 600.4 fewer deaths in the second than during the first of the two triennial periods. Here we have a reduction of the fatalities in collieries in three years equal to 20.02 per cent. when considered in relation to the quantity of coal raised, or at the rate of 6.67 per cent. per year. These figures show that the Duplicate Shafts Act has worked well, and of course is strongly in favour of the proposal for more shafts or a number of large bore-holes, which with modern appliances there would be no great difficulty in accomplishing. But, as Mr. MULVANY has anticipated, the position of the mine owner and the cost of constructing a system of independent shafts or bore-holes must be taken into consideration.

During the last year or two colliery owners in many instances have been losing money, as some of them are even now doing, so that they are not in a position to spend considerable sums of money for making alterations or improvements, even when calculated to give greater security against injury to life and property. That appears to be the chief difficulty to be taken into consideration. It is true that merchants and dealers in coal are those who make the profits, and this they will continue to do so long as competition between different districts is anything like what it has been, and this, we may expect, will continue to be the case whilst the productive power of our mines is so much greater than the consumption. Were the consumers of coal placed in a position to deal direct with the mine-owner, then the latter would be able to increase his outlay in carrying on operations; but middlemen in the London and other markets are all-powerful in the matter. But how public opinion can be influenced so as to insist that producers should have a larger and fairer proportion of the price paid by the consumer we are at a loss to discover. Indeed, we only wish the idea could be carried out. It would be out of the question to ask the Government to pass an enactment of a compulsory character as relates to the carrying out of the principle of ascensional ventilation with increased shafts or a number of bore-holes, so far as regards old collieries, some of which are from 700 to 800 yards in depth; but something might be done with respect to those that will be sunk in the future; and here we would be again met with the objection that the cost of sinking would be such that the new mines could not compete with the old ones. The views of Mr. MULVANY to which we have called attention are, undoubtedly, eminently practical, and well calculated to carry out the object he desires—the rendering of explosions under ordinary circumstances all but impossible—and we should prefer seeing our mining engineers placed in a position to effect that object instead of the subject being taken up by the Government. It should, however, be recollected that a Royal Commission was appointed nearly two years ago for the purpose of enquiring and reporting whether, and how far, the fluctuations of atmospheric pressure affected fire-damp, to the adoption and efficient application of trustworthy indicators of the presence of explosive gas, and also to improved methods of ventilation and illumination, as well as to the employment of explosive agents in the getting of minerals. From the high standing of the gentlemen forming the Commission it may be expected that whatever practical expedients are not now in use that the resources of science can furnish will be made known to us with a view to prevent explosions in

collieries. It will, therefore, be well to wait for the report of the Commission, which it is to be hoped will be made known as speedily as possible, before any marked change is effected in the working of minerals, or as regards the ventilation of our mines. There are means which should, however, be adopted at the present time, such as mechanical ventilation, really safe lamps, the abolition of shot-firing in mines giving off gas, the carrying out of the first general rule, which requires that an adequate amount of ventilation shall be produced in every mine sufficient to dilute and render harmless the noxious gases, and the strictest supervision. If such is done explosions will be all but unknown.

## IRON IN THE UNITED STATES.

It would appear that the United States still look mainly to Great Britain when they require foreign supplies of any staple article. Thus, while the American Iron and Steel Association state that 700,000 tons of pig-iron were imported into the United States in 1880, the exports of pig-iron from Great Britain to the Americans in the first 11 months of last year alone amounted to 593,448 tons. Affinity of language and descent probably still exerts a great influence; but allowance ought also to be made for the decided advantage which Great Britain possesses over France, Belgium, or Germany in respect of her unrivalled mercantile marine. The experience obtained with regard to pig applies also to a great extent to rails. Thus, of the rails imported by the Americans last year by far the larger part came from Great Britain. The authority which we have already cited estimates that 275,000 tons of rails were imported into the United States in 1880, and the exports of rails made to the Americans in the first 11 months of last year footed up to 207,094 tons, so that only about 50,000 tons of rails were probably purchased by American railroad companies last year in Belgium, France, and Germany. The increase in the production of rails in the United States last year—that is, the increase in the American rail manufacture for the year—was 206,000 tons. So great was the consumption of rails among the Americans in 1880 that even iron rails were made to a large extent, the increase in the production having been 42,000 tons. At the rate at which the American rail manufacture is moving on, it bids fair to soon make good the tonnage of rails which has still to be imported from Great Britain and Europe. Thus assuming that the consumption of rails remained stationary in the United States in 1881, the imports of rails in the same year would decline to 69,000 tons if the home production moved on at the same rate of increase as in 1880, while in 1882 the Americans would become entirely independent of foreign rails. It is to this complexion probably that they will come at last, and the statistics which we have just cited certainly enforce one conclusion very strongly—that our ironmasters must be content with moderate prices in 1881 if they are to secure rail orders of any importance from across the Atlantic.

It appears probable, however, that if times go well with the Americans the consumption of railway material in the United States will experience a still further increase this year. We think events have justified the conclusion which we have ventured to express with regard to American affairs during the last 12 months. We have from time to time expressed our opinion that the activity noticed in American railroads and in American business affairs generally was of a more legitimate character than at any previous period, perhaps, in American history. It is a notorious fact that American enterprise has always a tendency to degenerate into reckless speculation, and it is this tendency which has wrought such enormous mischief in times past in the American commercial world. We do not altogether assert that exaggerated speculation has become unknown in the United States, but we do say that American wealth and population are now so great as to place the American Republic upon a more stable basis than it has ever before occupied. It must be remembered that the Americans now compose a nation of 51,000,000 souls, spread over more than 40 States possessing natural resources of the highest class. Such a nation as this must obviously become a more important and wealthy one from day to day, and accordingly one which is less exposed to rapid commercial changes and violent financial panics. We confess that, notwithstanding the growth of American rail production, we still think that our ironmasters have a fair chance of making some good deliveries of rails to our American cousins in 1881.

## PROPOSED MINING LEGISLATION.

It is now understood that an active agitation will shortly be commenced for a change in the Mines Regulation Act of 1872, as well as for some important additions to it. In the general rules it has been found that no provision has been made for inspecting a mine where the men work three shifts. It is provided that in every mine in which inflammable gas has been found within the preceding 12 months then once in every 24 hours if one shift of workmen is employed, and once in every 12 hours if two shifts are employed, a competent person or persons shall examine the working places before the men commence work. Now, where three shifts are worked one would think there was greater necessity for careful examination than when only two were worked. It must be presumed, one would think, that the Legislature had no idea that in some mines men were always at work, as was the case at the Pen-y-Graig Colliery. Where such is the case a mine has no time to cool, the air becoming heated, whilst the result of the breathing of the men and the combustion of light was made at the expense of the oxygen, giving an excess of nitrogen, which if it does not influence the animal economy, renders the air unfit for the maintenance of lamps and life. One of our inspectors laid it down some time since that the number of visits that should be made to the working places of a mine giving off gas should at least be four daily—one before the men enter the places to see that the air was good, the roof safe, with a sufficient quantity of timber; two during the time the men were at work; and once about the time when the men were leaving off. Increased inspection and examination might, therefore, do a considerable amount of good. It has also been felt on the part of the men that the penalties for wilful negligence, where there is imprisonment, is unfair, and efforts will be made to have a change. The appointment of persons to act as deputies or fire-triers appears to have been unsatisfactory to the miners and those who represent them. They are chosen from amongst the workmen and are not always the ablest, although their duties are most onerous, seeing that the safety of all the persons in a mine frequently depends on them. They have to go round the working places before work is commenced and examine them with a safety lamp to see that they are free from gas, and report as to the state of the ventilation. It is now proposed that persons before being appointed to such a position should undergo an examination as to their knowledge of gases, and be entitled to a certificate. This, no doubt, would give a superior class of officials, although we are not aware that the present class of deputies, taken altogether, are in any way deficient in their knowledge of what is required of them. It does not appear necessary that a man who is appointed to detect gas need be acquainted with the laws of the movement of aeriform fluids, or with the laws of MARRIOTTE and GAY-LUSSAC, which determine the weight of gas under a given pressure and temperature.

The adoption of mechanical ventilation, it may also be said, has led to the working places being more fully swept free of gas, so that the duties of fire-triers has not become more exacting than they were. But employing those who were trained to the position, and had to undergo a certain amount of education, would only increase the cost of working our mines, and take from the certificated managers a good deal of responsibility which they only should bear, and from which under no circumstances should they be relieved. The appointment of check-weighman by the men has not worked quite so satisfactory as could be desired, and some change is to be asked for. At present the check-weigher of the men has to be one of the persons who had been previously employed either at the mine at which he is to be stationed, or another miner belonging to the same owner. There certainly does not appear any reason why the person the men appoint and pay for certain duties should have been employed by the owner. The question of the appointment of more inspectors and sub-inspectors will be brought forward, as many of the workmen consider that mines should be frequently inspected without notice by the Government officials, and consider that by so doing more irregularities might



be detected which now go unnoticed. The matter has been discussed on many occasions, and brought under the notice of Government. At present the Home Secretary has the power of appointing inspectors, and paying them such salaries as may be approved of by the Treasury. It has been objected, and with great force, that the appointment of additional inspectors for the purpose of visiting and inspecting mines, and giving advice as to the best means of ventilating and working, would place upon their shoulders a responsibility which should only rest on the manager, whose duty it is to be at the mine daily, give orders, and see that everything is done to ensure the safety of the workmen and of the mine. On the part of Government, should there be any legislation during the present session with regard to mines or mining, the question of blasting will, no doubt, receive attention with a view to alteration. Seeing that the Act of 1872 greatly increased the liabilities, penalties, and obligations of mineowners, besides increasing the cost of raising minerals, it is to be hoped that there will be no legislation such as will harass an interest that has more than any other been handicapped by Acts of Parliament. Owners of mines should now pay vigilant attention to what is going forward, for the legislation proposed on the part of the men might be fraught with the most serious consequences to them, so that they should be prepared to act together for their defence and protection.

#### DEATHS FROM COLLIERY EXPLOSIONS IN 1880.

At the present time when so much interest is shown in the prevention of all that relates to explosive gases in mines, owing to the recent fatal occurrences at Seaham and Pen-y-Craig, public attention to the explosions which took place in 1880, and the number of persons killed by them, may be considered opportune. The number of persons killed during the year by explosions of fire-damp contrasts most unfavourably with 1879. The South Wales districts again take the lead in fatal explosions, and it has been suggested that there must be something peculiar in working the seams there, seeing that serious fatalities are so frequent. This is forcibly shown by the fact that considerably less minerals are raised per life lost than in any other district in the kingdom. From the returns for 1879 it appears that in South Durham during that year 309,434 tons of minerals were raised for every life lost. In Yorkshire, where the mines are amongst the most fiery there are, 145,866 tons were raised per life lost; whilst in South Wales only 67,430 tons were raised per life lost. In some districts, where blasting has been discontinued, the results have been most satisfactory. In South Yorkshire, the most fiery mining district in the kingdom, and in which 189 persons were killed at Lund Hill in 1867 and 360 at the Oaks Colliery in 1866, there has been a marked freedom from explosions of late years, owing to blasting being done away with at most of the mines, the use of the best safety-lamps, constant attention to the ventilation, and introduction of fans, with strict supervision. The generation of gas, in the Barnsley district in particular, the gas exudes violently from the floor and roof, the pressure in some instances having been found as much as 100 lbs. to the square inch. Notwithstanding the immense volume of gas pent up, and the liability to sudden outbursts, last year there was no explosion whatever in the Barnsley district. The Mines Regulation Act, where strictly enforced, appears to have been beneficial in preventing accidents. The Act came into operation in 1873, and during the six years preceding its coming into operation the deaths from explosions were 1818 for every 6,000,000 tons of coal raised, whilst for the following six years the deaths from the same cause were only 1297 for every 6,000,000 tons of coal raised. Derbyshire and Notts last year had no explosions whatever, although the beds are the same as those in South Yorkshire but rather less fiery. Mr. Evans, the Inspector of Mines for the counties named, attributes this in part to legislative enactments and in part to the higher standard in the class of managers, the better machinery, and the better discipline maintained in the mines. The number of persons killed by explosions in 1879 was 158, whilst last year it was 472.

In the case of the Lyceet explosion it appeared that there was a manager just in office before it took place who had been summoned for not providing sufficient ventilation. The Government Inspector, Mr. Wynne, was of opinion that the gas had been ignited by the firing of an over-powdered shot. At the Belle Isle pit a flaming lamp was carried by one man, and the gas came from the floor. Naked lights were used, as the mine was considered a safe one. Gunpowder was again the cause of another explosion, that at Kiveton Park, where some of the colliers were boring a hole in a bank for the insertion of a charge of powder, so as to bring down a fall of coal. The shot was fired, which brought down a quantity of coal and gas as well, which exploded. At the Carroch Colliery, where three men were killed, it appeared that one of the men struck through some old workings from which gas escaped, causing an explosion. The Risca Colliery has been a most unfortunate one, and the Black vein seam of coal worked in it most gaseous. At Risca explosions occurred in that seam in 1846, when 35 lives were lost; in 1853, when 10 persons were killed; in 1860, when 142 men were killed; and again in 1880, with the loss of 120 lives. When the first explosion took place naked lights were used, and in 1853 attempts were made to get the men to work with safety-lamps, but the men positively refused to work with them, alleging that they could not make a living without using a naked light to see the coal. At the Bersham Colliery, Wrexham, North Wales, the explosion was the result of a shot. The explosions at Seaham and Pen-y-Craig have not as yet been explained, so that it would be premature to more than allude to them; but from the above statements some idea can be formed as to the cause of most of the explosions that took place during 1880, a year which has been most disastrous as regards the loss of life in our mines. In conclusion, we may say that most of our mining engineers will agree with the recommendation of the jury who sat to enquire into the cause of the explosion at the Lyceet Colliery, which was as follows:—"That blasting by powder should be discontinued altogether in fiery mines while men were working therein."

**HUNGARIAN COPPER COMPANY.**—An advertisement in another column intimates to those who have recently made application at the company's office, that all the shares have been subscribed for and allotted. An active business on the Stock Exchange is reported to have been transacted during the week. It appears that the copper exists principally in the form of rich grey ore, with gold in association, and that the mines have attracted the close observation of some of the best authorities in Hungary. So far, however, as the English shareholders are concerned (for it is said that a large proportion of the capital is held in Hungary), they will probably be satisfied with the knowledge that those associated in the enterprise are already connected with some of the most substantial and successful undertakings of recent years, and that Mr. Evans of the Mona Mines has given a special report on the properties, confirmatory alike of their present value and their high future.

**MINERS' DANGERS.**—A few days ago a workman employed on the St. Gothard Railway, near Siskion, had, says the Geneva correspondent of the Times, a marvellous escape from a terrible, and, as it seemed, an inevitable death, or terrible bodily injuries. Together with a number of his companions he had been drilling holes in the face of a perpendicular rock, a portion of which it was desired to blast away. When the holes were filled with dynamite it fell to his lot to fire the charge. After waiting till the shouts of the others apprized him that they had reached a place of safety, and lighting the long mesh which served to explode the cartridge, he essayed to make good his own escape. In order to accomplish this—for it was now too late and would have been extremely perilous to take the way his comrades had taken—he attempted to ascend, by means of a rope placed there for the purpose, to a spot where he would have been out of danger. He seized the rope and began to mount, but it had been so wetted by a shower of rain which had fallen shortly before, that although he struggled with the frantic energy of despair, he only succeeded in mounting a few feet. His comrades saw, but could give him no help. The mesh was growing shorter every moment, and the explosion was now an affair of only a few seconds. It came, the earth shook, the great rock trembled to its base, huge

stones flew through the air, and for several moments everything was hidden in a cloud of dust. When it cleared away, and the navvies issued from their hiding place to look for the remains of their comrade they found him quietly slipping down the rope. Not a hair of his head had been injured.

#### MINING IN COLORADO—COAL FOR THE LEADVILLE DISTRICT.

So many British capitalists are interested in the mines of the Leadville district, and an abundant supply of good and cheap fuel is of such paramount importance for profitable mining, that it is particularly gratifying to learn that there are facilities opening out for an abundant supply from the adjoining Wyoming Territory. The organisation of the Philadelphia Company, which has located 2500 acres of coal land, and the California Company about as much more. These lands are on Hay creek, in Crook county, Wyoming, about 35 miles from Deadwood in a north-westerly direction. At this point the first croppings of coal are met with, and it is thought by such men as Thomas Green, who has devoted years of his life in operating coal-banks, that the formation extends indefinitely almost in a north-westerly course, and that the supply is as inexhaustible as that in the State of Pennsylvania. The first-named company has done a large amount of work in prospecting and developing, and has arrived at that point where it has become satisfied that it has an abundance of coal for any demand that may be made.

There are two veins that have been discovered. The first or upper one from 3 to 4 ft. in thickness, and the lower one fall 6 ft. in all places. In the lower vein a drift has been run in 300 ft., and the last 230 ft. is all in solid coal. The coal, a specimen of which can be seen at Gaston and O'Brien's, is splendid, the upper and lower portions of the strata being alike, and as good as the very best portions of Iowa and Illinois coal. The superintendent, Mr. Green, says that he can, with the present development, take out 50 cartloads of coal in a day, at a cost of from 4 to 5 cents per bushel.

This coal, laid down in Deadwood by team, costs \$12 per ton, and families who used it last winter think that, with the sawing and splitting of wood, it is about as cheap as wood, even at that price. What we want is a railroad, and if Eastern capitalists who have money to invest, and are glad to put it in Government 4 per cent. bonds, knew of the quality and quantity of coal we have, and the market there is for it, they would jump at the chance of building a railroad.

#### THE LA PLATA MINING AND SMELTING COMPANY.

The subjoined descriptions of the position of this very successful company from New York and Leadville journals just received will without doubt be interesting to the English shareholders in this company. They more than confirm all that has been said in the *Mining Journal* in favour of the company, and satisfactory as is the monthly dividend, paid with regularity for the last 16 months, rumour points to a still further increase in the profits and dividends at no distant date. The shares are quoted 2 to 2½ per share.

**THE LA PLATA MINES.**—Among the Leadville mining properties that have made noteworthy developments during the past year, and have, says the Daily Democrat of Leadville of Dec. 9, risen from comparative prospects to paying mines, is the La Plata, located on the south side of California Gulch, adjoining the well-known Rock Mine. Early in the spring the developments showed very little ore indeed, and shipments were not very frequent. Mr. M. E. Smith, the manager of the La Plata smelter, then took charge of the property, and commenced a systematic and thorough exploration of the contact vein in the territory of the La Plata and Gneiss claims, and soon met with very gratifying results. When the mining editor of the Democrat visited the mine yesterday he was kindly received by Manager Smith, who took him through all the workings of the property, and afforded him every facility for inspecting the ore bodies, and making himself familiar with all the drifts, and the large amount of ore in sight.

The developments of the La Plata consist of a tunnel and three shafts. The tunnel has attained a length of over 700 ft., running south through the centre of the claim. The face is in contact matter, barren at the present time, which is 21 ft. in thickness, showing lime in the bottom, pitching to the east and south. From the tunnel there are five cross-cuts running east and west. The third and fourth cross-cuts east have winzes connecting with the ore bodies below. The fifth or Gneiss cross-cut connects with the Gneiss shaft, and is being driven eastward beyond this shaft, in contact matter and decomposed porphyry, between the solid rock above and the lime below. The Gneiss shaft extends from the surface down some distance below this level. About 400 ft. from the mouth of the tunnel is the fourth, or main cross-cut, which has a deep winze on the east, and connects with the Rustin shaft at the western extremity, about 90 ft. from the tunnel. Here a large chamber has been cut out, and a small steam engine stationed, which hoists the ore from the levels below, when it is dumped into cars and run out through the drift and tunnel to the ore platforms.

Descending the shaft 40 ft., the second level is encountered, running south and showing mineral the entire distance. At the further end of the drift or level a winze has been sunk, showing the ore, consisting of fine carbonates of lead, to be 18 ft. in depth. The winze is about 60 ft. deep, passing through the ore into lime, and at the bottom connects with a lower drift, which has been driven southward, and again encounters the ore body in its south-eastern dip. Returning on the second level nearly to the Rustin shaft, and going down a few feet on the east side of the level, a magnificent body of mineral is exposed to view for quite a distance, in some places 16 ft. in height. The ore is a hard grey lead carbonate, with some sand interspersed, and a splendid smelting mineral. Descending the Rustin shaft 30 ft. more, another station is encountered, from which two levels are being run, one to intersect the winze sunk at the northern terminus of the level above, which discloses 18 ft. of hard grey carbonates, and the other eastward. The south level has only a short distance to go when it will intersect the winze, and as soon as this is accomplished ore can be mined and hoisted much more expeditiously and economically. The east drift, or level, opens into a magnificent body of mineral, about 30 ft. east of the shaft, which has been penetrated to a depth of about 25 ft. The face, walls, and roof of the drift show fine carbonates, interspersed with bunches and streaks of sparkling galena. The drift is headed for the ore bodies developed on the east side of the tunnel, and which are being run from the bottom of the No. 4 winze. At a depth of 42 ft. below the east No. 4 cross-cut of the tunnel level, the second level on the east side is encountered, running west and then south under the tunnel. From this place branches eastward again, and make quite an incline to a level below, which connects with the bottom of the winze.

These workings all show immense amounts of good mineral, the ore body in one place being about 15 ft. in thickness. The drift, which is run in a south-western direction, is headed for the workings about the foot of the Rustin shaft, and discloses some fine mineral. The distance between these two drifts, the face of which are in ore, is about 80 ft.; and at this space is an immense ore body, which seems to be the case, judging from developments, the amount of ore in La Plata is beyond estimation. The amount of ore developed by the workings at the present time even is above calculation, and promises at an early day to place the La Plata Mine in the front ranks of the largest producers in the camp. The shipments at the present time amount to about 30 tons per day, all of which is obtained in driving prospect and exploration drifts, and no stoping has been done in the mine. The ore produced has reached these figures only during the past month, when the steam hoisting rig was put up in the east level, and the facilities for raising the ore increased 35 per cent. of less and carries from 14 to 17 oz. of silver to the ton. About 40 men are employed in the mine, 24 of whom are working at day work, and are engaged in driving drifts and levels below the tunnel level, and break and hoist ore. The remainder work on contract, and are engaged principally on the tunnel level. The work is all substantially and well done, and will last for many years.

**THE LA PLATA SMELTING WORKS.**—First of the locations in this wonderful camp was the La Plata Mine, located in 1876 or 1877 by L. F. Bradshaw, which at that time ran about 30 oz. in silver. At that period, says the Mining Record of New York of Dec. 4, ore of that grade did not pay for shipping. The claim was and is located on the south side of California gulch, not far from Oro City, just below the Rock Mine, belonging to the Iron Silver Mining Company, of which I will speak later on. Messrs. Berdell and Witherell bought the claim from Mr. Bradshaw; at that time some parties had a small claim adjoining, and threatened litigation, being also in the ore claim was also bought by the same parties. Subsequently, Messrs. Berdell and Witherell, who may be called pioneer smelters, having commenced operations three years ago at Malta, bought another location near by called the Gneiss, and at a still later date two-thirds of the Montgomery was also bought, and is now only worked for the lime which is upon it. All this territory now belongs to the La Plata Mining and Smelting Company, in my opinion, at present the most flourishing company in Leadville.

The developments of the above mining property consist, first, of the main La Plata tunnel, 7 by 9 ft., at present 700 ft. into the mountain. At 350 ft. a drift east connects with a winze 45 ft. deep. At 430 ft. a drift west 92 ft. connects with the Rustin shaft, and at the connecting point a large chamber has been made, where the steam hoisting machinery has been erected. At the same point a drift east connects with No. 4 winze. At 640 ft. a drift runs east, and, though not connected now, it will in a few days connect with the discovery shaft of the Gneiss property. At the face of the tunnel, 700 ft. from the entrance, the contact has been encountered, and the tunnel is being pushed ahead. Going down No. 4 winze 65 ft. we got down to the second level. Here I found three faces in ore in one place about 15 ft. The ore from this level is also hoisted out of the Rustin shaft. There is also some work being done in the third level 46 ft. below, and at two places ore is found there. Thirty-two men are employed at this mine under the general superintendent of the company, Mr. E. Smith;

Mr. Walker being foreman at the mine. Mr. Houghton, a mining man of large experience on Lake Superior, and for some time superintendent of the Moose Mine, is the consulting engineer at the mine. The hoisting works had only just been placed a day or so before I visited the mine, and while they were making the necessary changes no ore could be hoisted for a few days, but until they stopped they had averaged about 35 tons a day running 17 ozs. of silver, and 30 per cent. lead.

This may not seem a bonanza to your readers, and still it is to some extent, as the works belonging to the company use all the ore to very good advantage, especially on account of the large percentage of lead. Nine teams are busy hauling ore from this mine along to the smelter now. When Mr. Smith took hold of the mine it was hardly producing at all, so that he has great reason to be satisfied with his success. There is hardly any dump. The product is expected to be nearly a hundred tons a day before long. It is all the way down hill to the smelter, about 3 miles below on California gulch. Since the company have been organised the capacity of the smelter has been increased about 100 per cent. At that time there were only two furnaces, now there are four; two engines and three large boilers enable them to run on without ever stopping. They have three Knowles pumps, one only to be used in case of fire, and three Blake crushers.

At the time of organising the company there were 14 bins for the receipt of the ores covering 30 by 60 ft., now the ore shed alone covers 60 by 120 ft., making 40 bins, and four large mixture bins, each with a capacity of 450 tons. At the time when I visited the works there was a string of half a dozen teams unloading ore, and several waiting to pull in as soon as others were empty. The amount of money actually in use at present varies from \$350,000 to \$500,000 caused by the heavy stock of ore on hand averaging from 2000 to 3000 tons, a heavy stock of charcoal and coke, and the long time which it takes from the time the bullion is shipped to get returns. This time is sometimes as much as 10 weeks. Two under tracks have been laid by the railroad to convenient points in the ground of the works, on these grounds are besides, the buildings of the smelting works, a number of houses for the employees, a company house, residence for the president, and large boarding-houses, besides a fine office building.

#### THE HUNGARIAN COPPER COMPANY.

There is no lack of capital for sound *bona fide* enterprises, and with the feeling that there will shortly be a reaction in the price of metals, and that money will be abundant and cheap, it is not considered to be a matter of surprise to find the shares of the Hungarian Copper Company in good demand, seeing that all solid concerns of a similar nature have so materially increased in value during the past 12 months. It is anticipated that the recovery in the price of copper will be very considerable. All through the recent period of depression shrewd bayers, with money in hand, were going about quietly picking up the shares of such copper mining concerns as the Rio Tinto and Panulillo Companies, upon which they now see a profit of 100, 200, or even more, per cent. Eighteen months ago Panulillo Copper shares were quoted 1½, they are now 5½. 15s.; Rio Tinto shares were quoted 4½, and are now 19½. Cape Copper shares were at 27½, and are now at 41½. It is unnecessary to multiply examples, those cited being sufficient to prove how great are the prizes offered to discriminating investors in copper mining properties.

In view of the impending rise in copper, an impulse is naturally given to the development of copper mining business alike at home, in the colonies, and abroad. As regards this latter field, Hungary bids fair to come forward as a producer of copper. A prospectus of the Hungarian Copper Company, in 60,000 shares of 1½ each, with a working capital of 12,000£, has been issued, with a brief description of the properties owned by the company, and remarks thereon made by Sir Carl Stoll (Member of the Hungarian Parliament), and mining adviser to the Hungarian Government; and extracts from a special report made by Mr. T. F. Evans, late Her Majesty's Inspector of Metalliferous Mines, and now managing director of the Mona Copper Mines, Anglesea. This Hungarian company is said to be principally taken up by those members of the Stock Exchange who are not only identified with the introduction of the Mona, but were also the chief persons interested in the celebrated Van Mine, where the shares rose from 4½ to 80½ in less than 12 months, and by whom the entire capital of the Hungarian Company has been subscribed.

The mines are situated near Kapolna, in the county of Heves, about 55 miles by railway from Buda-Pesth. The metalliferous deposits are situated in three hills, known as the Lahocza Gebirg, Feherko Gebirg, and the Veresvarer Gebirg; and the properties are held in perpetuity, free of royalty. The company possesses concessions for mining for brown coal, and also owns about 75 acres of freehold land, of which about 12 acres are good arable land. There are manager's and sub-manager's houses, offices, laboratory, stables, and outbuildings, engine and boiler houses, tank house for precipitating copper, storehouses, extensive buildings for dressing the ores, and well-built barracks for lodging the miners. All the buildings are situated close to the mines, in a pretty and fertile valley, and there is an unfailing stream of water for dressing purposes. The climate is excellent, being similar to that of North Wales. The outlay upon the mines, buildings, &c., has been about 400,000 florins, in addition to the money resulting from the sales of ore. The mines are known by the names of Guter Nachbar, Gottes Gabe, Stephanie, Alexander and Katharina-Georgi. The principal workings are at the latter (Katharina, Mittel Georgi, and Ober Georgi levels). Mr. Evans says:—"I visited every accessible portion of the workings to which these levels lead, and did all in my power to obtain the data for making a reliable estimate of the value of the property for the purposes of a sound and legitimate mining adventure. While underground I took samples which I considered likely to assist me in forming an estimate of the value of the mine, and now give you their contents in copper, silver and gold, as determined by Mr. Claudet, assayer to the Bank of England."

With regard to the results of the assays, Mr. Evans says:—"I consider these results very satisfactory, and on combining them with the observations made in the accessible underground workings and upon the surface, the opinion is forcibly impressed on my mind that the mining sets held by the company constitute a valuable property, which would handsomely reward the application of a due amount of capital, coupled with energy and skilful management. The prospectus, which it is understood will not be published, the capital being, as already mentioned, taken up privately, states:—"It may be mentioned that during recent workings Sir Carl Stoll, who for a limited period had taken charge of the property, states the copper ore sold averaged as high as 11½ per ton, owing to the gold and silver therein contained. Mr. Evans, however, strongly recommends smelting the ore into regulus on the spot. Coal is only about 10s. per ton, and by bringing the ore into metallic form a great saving will be effected in carriage, as well as a better price obtained for the product. As regards the other mines, Mr. Evans suggests they might be sold to and worked by quite independent companies, "as the company will have probably a sufficiently large concern in the Katharina-Georgi Mines alone." Mr. Evans concludes:—"I may add that this property is, in many respects, an exceedingly interesting one, and seeing that, in spite of the good results from the upper levels, nothing has been done down below the base of the hill, except to sink the small shaft, stated to be rich in ore and in a large lode, great results may be expected upon further development in depth, and, as evidence of the massive character of the lode, I may mention that in one place I stepped it and found it to be in all 45 ft. in width."

The association of gold with the copper ore is, of course, an element of very considerable value, seeing that it ranges from ½ oz. to nearly 1 oz. of gold per ton of ore (the latter being above the average of the well-known St. John del Rey Gold Mines), and brings up the actual market value of the ore very considerably, as will be seen by reference to Sir Carl Stoll's statement already referred to. Sir Carl Stoll, who personally knows the property, and from his position as Mining Councillor to the Government may be considered an important authority, speaks in even stronger terms of the capacity of the property. Writing under date March 22 last, he says that the total expenditure has been 562,000 florins, and that to give an idea of the value of these mines the opinions of the many noted and reliable mining men who have visited the property should not be underestimated. A. Schmidt, Imperial Royal Commissioner, sent by the Government to inspect these mines, prognosticated the best brilliant results. Prof. Dr. Posepny, the celebrated geologist, states that not only are the ores of great value, but it is evident that as depth is gained the ore increases in value, and that it is impossible to pre-estimate the enormous wealth therein contained. The Katharina gallery is run in the lode 40 fms., across the lode 20 fms., and 20 fms. in height, throughout in ore.

The Feherko Mountain, adjoining the Lahocza, contains several lodes rich in lead, copper, and silver—the lead lodes being especially rich. The mines on this mountain will require machinery for drain-



age and haulage, but Sir Carl Stoll says "It will undoubtedly pay enormously for the necessary outlay." This part of the property would be worked to greater advantage by a separate company, in which case the shareholders in the Hungarian Copper Company (Limited) would receive a considerable sum of money from the sale thereof. It may be mentioned that a calculation has been made that no less than 50,000 cubic fathoms of copper ore have been laid open in the Lahoeza Mountain alone. This quantity will be constantly increased as the workings are extended, as the producing capacity of the lodes appears to be practically inexhaustible. It should be added that Sir Carl Stoll has agreed to take the management of the mines.

## SOUND INVESTMENTS.

**GRAND TRUNK RAILWAY OF CANADA.**—The rapid and uninterrupted development of this railway has been one of the most remarkable features of the stock and share markets in recent times, and the greatly enhanced values of the various securities at once testify to the wonderfully improved position of the line and the favour with which they are regarded by investors. Its history under the present enlightened management literally comprehends one long series of successes, and in taking a retrospective survey of what has been accomplished within the past 18 months the proprietors must see that not only have they abundant reasons for rejoicings on the position already attained but they have ample justification for looking forward with hope and confidence to the future.

The changes already carried out have been manifold and various, and it may safely be affirmed that in every instance the company has largely benefited. The best evidence of this is afforded by the fact that it has gained an accession of financial strength which has enabled it to attract and lease tributary lines on very advantageous terms, to redeem prior charges of 6 and 7 per cent. bonds by the issue of 5 per cent. debentures at a premium, and further to take up for the first time its proper position in Canada as a powerful corporation, backed by a large and wealthy body of shareholders.

All these facts, however, though highly interesting in themselves, are forgotten in the one more prominent feature which is constantly being brought to the notice of investors—the astounding growth of the traffic receipts. Week by week, without intermission, the current has been upwards. Thus, for the 26 weeks of the past half-year just closed the gross increase has reached the immense total of 165,873*l.*, or an average of 6380*l.* per week. There can be no doubt that the net surplus will enable the directors to pay the full interest on 1st and 2nd Preferences for the whole year, and a satisfactory dividend on the 3rd Preference.

While this progress has been going on the position and prospects of the railway have been assailed in many directions by speculators and others, and warning notes have been uttered of impending disappointments, if not disasters. No other railway, indeed, has been subjected to such a fusillade of attacks, and the very fact of its securities withstanding these influences affords strong evidence of their inherent soundness. For a long time past a steady process of absorption of the various stocks has been going on, and the merits of the property are becoming so manifest (except to captious critics) that totally new and highly influential classes are attracted to them. The area of the proprietary is thus an ever-widening one, and this fact, with the concurrent progression of the railway in prosperity, must inevitably result in all the securities attaining a solid and very high position.

It may fairly be argued that if such advances have been made during so comparatively dull a period as the past 18 months, there is practically no limit to further improvement, now that the whole continent of America is suffused with the light of returning commercial activity. Canada must surely participate in the prosperity which is now dawning, and as a necessary consequence her principal railway—the Grand Trunk—would be enormously benefited, especially when its strong financial position and reserved resources are duly considered. The accompanying map will show the important position which this railway occupies. The outlook is, in my opinion, so favourable that I fully anticipate a further steady advance in value of all the preference issues as well as in the ordinary stock.

**PHILADELPHIA AND READING RAILROAD.**—Following quickly upon the recent triumphant meeting of the bond and shareholders, and notwithstanding the frantic efforts of Mr. Gowen's enemies to defeat his plans for the settlement of the floating debt, the issue of the deferred stock, in accordance with his proposals, has been made and is now an assured success, as it already commands a premium of nearly 2 per cent. This new stock, at the issue price of \$15 per \$50 share (or 3*l.* to 10*l.*), must be an exceptionally cheap investment for the future, and all the other securities are well worth buying. The net earnings have recently shown enormous increases which are likely to continue, and when the President's further scheme for paying off weightier prior charges, by the issue of 5 per cent. debenture stock (as in the case of the Grand Trunk), is effected, there will, doubtless, be a sufficient revenue to pay 7 per cent. on both the ordinary and deferred capital.

But there is yet another great reversion which no other railway possesses, and that is the vast coal property. The least sanguine report estimates the minimum quantity of available marketable coal to be over 1,200,000,000 tons, and the royalty as worth 30 cents per ton, apart from miners' or railway carriers' profits. Thus the coal property alone would be worth \$360,000,000, while the whole capital of the company, bonds and shares, will only amount, with the new issue, to \$200,000,000. The gross earnings of the two companies in 1880, after deducting the carriage charged by the railway against the coal company, amounted to \$25,000,000, and in 1881 they will probably reach \$30,000,000. The map, which I publish herewith, shows what the connections of the Reading Company will shortly be. A grand future must inevitably open out for this undertaking.

Buyers of the shares should insist upon prompt delivery at the ensuing settlement on the 14th inst., so that they may be in a position to claim their proportion of deferred stock.

**ATLANTIC, MISSISSIPPI, AND OHIO RAILROAD.**—The improvement in value of these bonds has made further progress during the past month, and the rapidity of the rise was such that in order to answer the numerous enquiries which were addressed to me in consequence of my frequent recommendations of the security, I issued a special circular on Dec. 17 explaining the position of affairs.

Upon the basis of my estimate of the value of the stocks to be given in exchange for the existing bondholders' certificates a present purchaser of one of these certificates of \$1000 or 200*l.* (which is the smallest amount obtainable) at the current quotations of 135, and which would cost 270*l.*, would receive after next month new securities which should be worth 321*l.* The price now ruling also includes the cash payment of 2 per cent. due on the 11th inst. The earnings of the railway continue to increase every month, and the now approaching close of the receivership will place the securities in the front rank of American investments.

**NEW YORK, PENNSYLVANIA AND OHIO RAILROAD (LATE ATLANTIC AND GREAT WESTERN).**—Within the past few weeks there has been increased animation in the bonds and shares of this railway. The attention of the public has been directed to the lowness of present quotations by the fact of the resumption of interest payment on the First Mortgage Bonds, one-half the amount due on the 1st inst. being paid in cash and the balance in scrip.

An important element of strength is the introduction of the securities of the company on the New York Stock Exchange, where the demand for them is daily increasing. The upward movement in prices has been even more marked in America than here, and a rush has been made to buy up low-priced securities. Atlantic and Great Western bonds and shares remain about the lowest priced railway stocks in either London or New York, and as such are in especial favour in the latter city. The past misfortunes of the company have been due to various causes, one being the exceptional position of the property in being owned altogether in this country, leaving it without the salutary influence of supervision on the spot. Now that the Americans themselves are interested in the management will, for the first time, be carefully watched and sharply criticised. Strange as

it may appear, the revenues, both gross and net, are now less than they were 10 or even 15 years ago, while all neighbouring and connecting systems have doubled or trebled their receipts during the same period. This has been wholly due to the exceptional gauge of the line, rendering it entirely dependent on the Erie Company for access to the sea-board. The change of gauge to the standard width, and the opening of new connections indicated on the map which accompanies this circular, have now, however, entirely altered the position of affairs. By the Rochester and State line route access to the great system of the New York Central, with its lines to New York and New England, is secured, while a still more direct connection with the coast will soon be opened to the Philadelphia and Reading by means of the extension already commenced by an independent company. At Buffalo access is gained to the Grand Trunk systems, which will provide a market for the coal raised in the districts served by the Atlantic and Great Western. To the westward connection with all the leading points is given by the Cleveland, Columbus, Cincinnati, and Indianapolis Railroad, an alliance hitherto not utilized.

Holding a central position with all these valuable allies, the revenues of the line must continue to improve at a greater rate than in the past 12 months. Full interest should be earned during the current year on the First Mortgage, which would warrant a much higher price for these bonds. As to the lower securities, the demand from America will certainly cause a rapid advance. The enquiry for the ordinary stock is largely due to the fact that it carries the control of the company. American operators are well aware that whatever arrangements may be made for "voting trustees" or "beneficiary interests," the legal right of the shareholders to the control of a company cannot be set aside, and efforts, I believe, are at the present moment being made to purchase a sufficient interest in these shares to direct the future policy of a line which promises so much improvement in the future. English owners who wish to realise will get better prices for their holdings if they are content to wait the result of the development now in progress.

**NEW YORK, LAKE ERIE, AND WESTERN SIX PER CENT. SECOND MORTGAGE BONDS.**—By comparison with the Six per Cent. Bonds of other American railways, which are quoted from 115 to 120, these appear to be cheap (being very long dated) at the present price of 106, at which they return nearly 5½ per cent. to an investor. They are now amply protected, the net earnings for the year ending 30th September last showing a surplus of 360,000*l.*, after paying all bonded charges.

**MEXICAN RAILWAYS.**—Shareholders in this progressive railway must now be thoroughly convinced that the improved position rests on a solid foundation. This was made manifest at the recent meeting of shareholders, when it was explained that the new railways, about to be constructed under American auspices, will greatly tend to the advancement of this particular property.

**LONDON, CHATHAM, AND DOVER RAILWAY.**—The comparatively high level to which these securities have now attained must be very gratifying to those shareholders who have held on regardless of the adverse criticisms with which this railway has been so frequently assailed. It is evident that this is a sound and steadily progressive property. Although the mileage is less than half that of the South-Eastern, the increase in the traffic receipts during the past half-year amounted to 23,570*l.*, or only 3691*l.* less than the South-Eastern. The relative progression of the two railways has thus been exactly the reverse of that predicted by the advocates of the "fusion."

**ISLE OF MAN RAILWAY.**—As these shares include the half-year's dividend to Dec. 31, which will probably be at the rate of 5 per cent. per annum, they are decidedly cheap at 5*l.* 10s. The traffic for 1880 were 22,374*l.* against 18,351*l.* in 1879, an increase of nearly 22 per cent.

**ANGLO-AMERICAN TELEGRAPH.**—In view of the facts enumerated in my circular last month, and that the 7,000,000*l.* of nominal capital is selling at a little over 4,000,000*l.*, shareholders need not, in my opinion, be alarmed by the rumours in circulation as to a new American competitor in Mr. Jay Gould. That enterprising gentleman is the largest stockholder in the American Union Telegraph Company, which has already made an agreement with the new French Cable Company, so that any new cables could not receive traffic from either the Western Union or the American Union, who are respectively bound by agreement to the Anglo-American and the new French Company.

**TRAMWAYS.**—The traffic receipts of all tramways have exhibited great vitality for several months past, and the forthcoming reports and dividends are likely to be more favourable, and in marked contrast to those of the previous half-year. Current prices include six months' dividend.

**RHYMNEY IRON COMPANY.**—The 7 per cent. debentures of this company are well worth buying. I hope to issue a special circular referring fully to this property at an early date.

**CANADIAN COPPER AND SULPHUR COMPANY.**—The remarkable discoveries of gold and silver, coincident with the vigorous development of the company's ordinary resources, must entitle the 4*l.* shares at the present price of about 2*l.* 5s. to be regarded as an attractive investment.

**INDIAN GOLD MINES.**—It is only a year since I introduced the first of these companies, and when the whole project of gold mining in India was regarded as a "wild speculation." Subsequent events, however, have proved that the enterprise is rapidly developing into a great reality, and there are many indications at the present time that the various mining properties will prove to be great prizes. The cheapest shares in the market just now are the South Indian, Glenrock, and Phoenix, and I look for an early and considerable advance in value of all three. The latest reports are simply brilliant.

—From Mr. WM. ABBOTT'S Circular for January, 10, Tokenhouse Yard, London, E.C.

## THE NEW MINING COMPANIES OF THE PAST YEAR.

In next week's Journal will be published a tabular list of the British and foreign mining companies registered in 1880, compiled by Mr. E. Ashmead, of Drapers' Gardens, who for some years past has contributed to the Journal much useful statistical information relating to mines and mining. Looking at the present table, and comparing it with those supplied by Mr. Ashmead in past years, a good view is obtained of the state of the public mind as regards mining enterprise. The increase in the number of companies registered in 1880 will afford considerable satisfaction to those who never doubted but that the depression which had existed so long would at last pass away. The spirit of enterprise is inherent in human nature, and when it can find vent in a legitimate way—even though that way, as in mining, may be speculative—it will not be deterred, provided only it has confidence in those who lead the undertakings.

As regards the British public, the experience of many years has taught this—of the large number of persons who have spare capital few having energy and health are content to lend their money to the nation or the banks at 3 or less than that per cent. Apart from trade and manufacture, one has but to look at the official London Daily Stock and Share List to see the hundreds of million sterling invested in undertakings at home and abroad in the hope of obtaining more than what is called the legitimate 5 per cent. It is this enterprising spirit that has contributed so much to raise Great Britain as the leading commercial nation of the world. Stay legitimate speculation, and you stop national prosperity; check it, and it is followed by such depression as has lately been experienced. The present purpose, however, is with one branch of speculation—mining; next to agricultural the oldest known industry. It is a great pleasure to find it rapidly taking its true and proper place. The following figures are taken from Mr. Ashmead's tables of mining companies registered during the past five years for working metalliferous mines. It must not be supposed that the nominal capital of any year represents money available for working purposes. There is reason to know in many cases—especially during the first four years referred to—that for want of support a number of the companies hardly survived their registrations, while others, again, were reconstructions, and much of the capital was allotted as fully paid to old proprietors; and investors

cannot shut their eyes to the fact that in many cases far too large an amount was paid either in cash or fully paid shares for purchase and promotion:—

METALLIFEROUS MINES.					
	British.			Foreign.	
	Companies.	Capital.		Companies.	Capital.
1876	42	£1,138,060	.....	15	£1,582,940
1877	28	684,890	.....	16	899,000
1878	32	664,100	.....	18	652,400
1879	31	731,200	.....	16	1,318,000
1880	54	1,591,000	.....	56	7,582,500

Looking at the table for 1880, the reader is at once struck with the fact of the large amount of capital subscribed to work mines in a part of the world hitherto an untried field to the British capitalist—India. The one mine in the Madras district, successfully launched in 1879, has proved the pioneer for about 20 more in 1880. The reports that have been issued by practical men on this new field doubtless warrants a fair trial being made, but it is a question whether it would not have been better to have proved a few before launching the remainder. In mining, as in life, the greater the prize the greater the difficulty in obtaining it; hence gold is more difficult to win than any of the baser metals. These difficulties, too, are different in one part of the world from what they are in another. A reef, for instance, may be known by assay to contain a certain number of ounces per ton, but the same means and appliances that will work a reef at a profit in Australia or California will altogether fail if applied to reefs (say) in Brazil or other parts of South America. No new mining field was ever tried without its special difficulties, and India cannot be expected to be without hers. While on the one hand one cannot but admire the zeal manifested in this new quarter, yet the public would do well to temper zeal with discretion. The increase shown in the number of home metallic mines registered in 1880 will be viewed with unqualified pleasure by readers generally, being 54 against 31 in 1879, the western counties (Devon and Cornwall) showing a remarkable revival, much helped by the advanced price that was obtained for tin last year, and which seems likely to be maintained in this. As regards Devon and Cornwall it must be remembered that in addition to the registered companies there were last year formed a large number of unregistered new companies constituted on the Cost-book Principle, of which no record is obtainable. Under the Cost-book one and all, according to the Cornish motto, share profit or loss, as the case may be. Limited liability has never found favour in the West. Large sums for purchase money, free shares and promotion at the commencement, with preference stock and debenture stock at the end of a company, too often the case under the Companies Act, not being understood, or at any rate appreciated in Cornwall. The Cost-book has undoubtedly its disadvantages, but for working home mines it has many advantages over limited liability provided proper accounts are rendered and calls made to cover all expenditure.

The favour shown generally to mines last year should give encouragement this. It would be well if all interested in this great industry would take a lesson from the past as a guide to the future. Let it be remembered it is the enterprising investor who is the friend and promoter of mining—the man who expends his money in labour with the prospects of obtaining its value many times over from metallic ore, and so doing adds to the wealth of the country. Not the eager speculator who makes an application for shares one day with the full intention of selling them on the first opportunity at a premium. The latter, for all the good he does to mining enterprise, might as well expend his energies on the turf. It is to be hoped that the real investors in mining will in every case use due caution, look well before they leap, see not only that they have mines worth trying, but that the price they have to pay for them in the first instance is worth it, and also have some guarantee that they will be well and economically managed. Then, having once decided that the enterprises they may embark in are worthy of pursuit try them fairly and honestly, not being afraid of small discouragements.

## THE TAVISTOCK MINING DISTRICT.

The celebrity of the Tavistock district has long been established, and, with the exception of the Devon Great Consols, probably no mine has done more to make the value of the resources of the district evident than the Wheal Friendship, which has already yielded copper and other ores to the amount of about 1,500,000*l.*, paid dividends to the shareholders of considerably over 300,000*l.*, and returned nearly half that amount to the mine lord. An influential company has now been formed for carrying on the operations on a more extended scale, the Devon Wheal Friendship Mining Company having been incorporated with limited liability, which, after all, affords investors more protection than is possible under any other system; and a capital of 60,000*l.*, in shares of 1*l.* each, to take over the concern. As to the excellent prospects of the enterprise there appears to be no difference of opinion. As practical opinions are always infinitely preferable to theoretical ones, reference may be made to an encouraging account given by an old Wheal Friendship miner, especially as the style of his communication is calculated to give confidence that he writes with a full knowledge of the facts of the case. He says:—

Dec. 25.—Just before the mine was left to get full of water there was a very important discovery, where a man had pitch in back of the 140 on Bennett's lode, west side of the cross-course, and cut a run of ore, where it is whole ground from there to the surface; the lode when stoped would produce 2 tons per fm. Below the 160 they had a bunch of ore 8 ft. wide, and came down on a floor of capel and cut out all the ore at once. I believe a very little outlay would discover a bunch of ore again. This capel can be traced in the level above where it is ordered the lode. Then at the 170, east of cross-cut, there is a bunch of mundle and a little ore 40 fms. in length, worth 20*l.* per fathom, standing 20 fms. high in the back, and all whole ground in the bottom. At this level the west side of the cross-course lode has not yet been discovered. I think this to be an important point, as the lode is productive on the east side of the cross-course. On the south underlayer lode at the 150 two stopes in the back and two in the bottom, worth on an average 10*l.* per fm., and many places on this lode that were worked for copper only back years ago when mundle was no value would hardly pay then, but would pay well now. There are hundreds of fathoms in length on Kent's lode and Bennett's lode that have not yet been tried, yet which I believe would prove productive if they were tried. I think if the mine was in working order it would be a good dividend mine without any other discovery for years. It was my duty to visit all the places that were working when the mine was suspended.

The prospects of the enterprise will, of course, be improved by the facilities which now exist for rapid working—by introducing rock drilling, more powerful explosives, and so on—and consequent reduction of fixed charges, and when to this is added the improving appearances of the copper and tin trades, and the increased price now obtainable for arsenic, the shareholders would certainly appear to have a good chance of handsome dividends to look forward to. This is, indeed, the opinion of all in the district, in proof of which one other communication may be quoted:—

Dec. 30.—Seeing in the newspapers that there is a company of gentlemen about to work the old Wheal Friendship Mine, I should like to say a little about what I have seen and know about the mine for more than 40 years. When a boy I worked on a lode called Sprage's lode, which was, and still is, very rich for tin and arsenic. James's branch, which is very rich for tin. There is a lode known as the south underlayer, which is very rich for arsenic. When the mine was stoped there were stopes worth 10*l.* per fathom for mundle alone. There is also another lode known as Bennett's lode; this is very rich for arsenic and copper. In the bottom of the 170 there is a bunch of mundle from 3 to 4 ft. wide, valued when stoped at 30*l.* per fm. In the 150 we drove on a lode very rich for arsenic. When we got near a cross-course we cut a fine course of ore, which held up as high as the 76. We drove through the cross-course in the 150 and cut the lode, but many fathoms off from the cross-course, and I have not the least doubt on my mind but what there is a bunch of ore between where we cut it and the cross-course, for it was a very kindly lode where we cut it to pay for taking away for copper and arsenic. In the 140, some hundreds of fathoms further west, was a good course of ore cut going into whole ground, and the man who worked it did well for several months, which the books can testify, and I have not the least doubt on my mind, and many besides myself, but what there are thousands of tons of copper on this shoot of ore. Many men will say, how is it Wheal Friendship Mine become so rich now? Why were not these riches taken away at the last working of it, when they sunk about 20,000*l.* in 20 years? This I admit, but we sunk about 1000*l.* a year in officers when one or two ought to do the work easily. Then we had nothing but copper to support the mine; now they can sell the whole arsenic, copper, tin, sand, and the balansa for half last. I am sure Wheal Friendship can be made to pay well for a great many years if nothing more is discovered.—R. G. FRIEND.

The prospectus of the Devon Wheal Friendship Mining Company is published in another column of to-day's Journal, and it is gratifying to learn that already the applications for shares have been so numerous as to ensure an ample working capital being provided, and consequently the energetic prosecution of the mine. It is pointed out that the present profits will be much increased as



the levels on Bennett's lode are drained, and the directors confidently anticipate that dividends or interest on the capital will be paid the first year. Although the directors fully expect, with the immense quantities of arsenical pyrites in these mines, that considerable profits from this source will be made, yet it is chiefly to the copper as well as to returns of tin that they look for large and permanent favourable results. The quality of the copper ores from this property has hitherto been unusually good, while the tin found formerly was mostly thrown away. The company will, without doubt, commence operations with abundant facilities for conducting the undertaking to a successful issue; and the gentlemen connected with the direction and management are so well known, and of such long experience, that permanent success is considered certain.

**WANTED.—TENDERS** from first-class Firms of Sharebrokers to PLACE TWELVE THOUSAND £1 SHARES in a LEAD MINE (LIMITED), by commission, including all expenses. Address, "Beta," 103, Lees Road, Oldham.

**MR. ALEXANDER DAVIDSON,** STOCK AND SHARE DEALER, 139, LEADENHALL STREET, LONDON, E.C., OFFERS THE FOLLOWING SHARES FOR SALE at the NETT PRICES AFFIXED, provided they are not sold, withdrawn, or price advanced:—

2 Carn Brea, £123 15s.	80 Polrose, £17½.	35 Wheel Bassett, £25 5s.
4 Dolcoath, £25 5s.	15 South Frances, £123½.	25 Wh. Grenville, £11.
10 East Pool, £35 12s. 6d.	10 West Bassett, £15½.	110 Wheel Jane, 16s.
25 Penhalls, £1 18s. 3d.	5 West Frances, £10 15s.	20 Wheel Kitty, £24½.
50 Phoenix United, £2¼.	30 West Kitty, 18s. 9d.	25 Wheel Peavor, £27½.
5 Devon G. Con., £17.	50 Marke Valley, £1 11 6	100 So. Wh. Crebor, £1 7s.
40 Devon G. Uni., £2 1 3	24 Mona, £14 18s. 9d.	140 West Caradon.
40 East Caradon, £1½.	75 Morfa Du, £1.	100 West Phoenix, £1 16 3
100 East Crebor, 17s. 3d.	80 Parys, 21s. 6d.	40 Wheel Crebor, £4 8 9
50 Gawton.	100 Prince of Wales.	115 Wheel Jewell, 13s.
	1 South Caradon, £67½.	

**LEAD MINES.**  
110 Herodfoot, 16s.  
25 Leadhills, £2 15s. 9d.  
10 Minera, £9 12s. 6d.  
10 Pen-y-Oscedd, 23s. 9d.  
10 Roman Grav., £3 12 6  
120 South Daren, £2 1 3

**FOREIGN, COLONIAL, AND GOLD MINES**  
60 Alamillos, £1¼.  
150 Alma and Tir., 10s. 6d.  
50 Canada Copper, £2¼.  
120 Devala-Moyar, £2.  
20 Eber and Auro., £3½.  
70 Indian Glen., 31s. 6d.  
110 Indian Phoenix, ¾ pm.  
N.B.—Any part of the above can be obtained. Less prices might be accepted in some cases if offers were made. Offers can be made where no price is affixed. SPECIAL NOTE.—Any of the above shares will be sold for payment end of January, 1881, on 25 per cent. of the purchase-money being paid on purchasing.

**JOSEPH JAMES REYNOLDS,** STOCK AND SHARE DEALER, 6, MOORGATE STREET, LONDON, E.C.

ESTABLISHED 30 YEARS.  
The increasing favour for mining as an investment has caused J. J. R. to select three or four Progressive Mines which possess the strongest claim on public confidence. These consist—first, of proved lodes and strata; second, abundance of capital subscribed; third, proved mining knowledge to rapidly and properly apply the same.

J. J. R. confidently believes that at least three of the four mines referred to will not only declare dividends, but will advance in price some hundreds per cent. in a short time.

J. J. R. has spared himself no trouble in making his selection, knowing that in bringing money to his clients he enlarges his own business by having caused increased confidence in his judgment and knowledge. J. J. R. WILL SELL:—  
1 Butlark. 15 East Caradon, £1 12 6  
50 Bedford United, 30s. 10 Chiverton, £1½.  
1 Carn Brea, £125. 1 East Pool, £35.  
5 Cook's Kitchen, £12¼. 10 Herodfoot, 12s.  
5 Devon Con., £16 15s. 10 Hington Downs, £1½.  
25 Devon Gt. Un., £2½. 50 Lady Ashburton, 20s.  
1 Dolcoath, £58. 10 Leadhills, £2¼.  
10 Drake Walls. 50 North Alfred.  
50 E. Devon Con., £2¼. 10 North Penstruthal, £2  
50 New Kiddy.

**STOCKS AND SHARES.**  
FOREIGN BONDS, TELEGRAPHS, TRAMWAYS, RAILWAYS, AND OTHER LEADING SECURITIES.

**MR. JAMES STOCKER, STOCKBROKER,** 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

Bedford United.	Herodfoot.	Canada Copper.
Carnarvon.	Killbreth.	Cedar Creek.
Devon Consols.	Marke Valley.	Chontales.
East W. Lovell.	Mona.	Devala Moyar.
East Caradon.	Parys Corporation.	Emma.
East Van.	Prince of Wales.	Exchequer.
East Pool.	South Wheel Frances.	Indian Glenrock.
Gunnislake.	Tankerville.	La Plata.
Gawton.	Van.	Mysore.
Glenroy.	West Caradon.	Nouveau Monde.
Grogwinion.	Wheel Crebor.	Ruby and Dunderberg.
Hington Downs.	Wheel Jewell.	South Indian.
		Potosi.

ESTABLISHED 1848.  
BANKERS: LONDON AND WESTMINSTER.

**NOTICE.**—In reply to numerous enquiries and applications for Shares in the HUNGARIAN COPPER COMPANY (LIMITED), the Directors have to state that ALL THE SHARES in this company were some time since SUBSCRIBED FOR and ALLOTTED.

**GOLD DISCOVERY IN CORNWALL.**—Gold being reported, in paying quantity, in the tin ore of FORTESCUE (STANNAGWYN), speculative buyers, for a heavy rise, should make immediate application to PATRICK BARRY and Co., Midway Chambers, Union Court, Old Broad-street, London. Rare chance for investors.

**MR. J. B. SARGENT,** STOCK AND SHARE BROKER, LISKEARD.

Mr. J. B. SARGENT, having had many years' experience in Mining, and residing in the district of the celebrated CARADON, PHENIX, HERODFOOT, and MENHENIOT Mines, is in a position to GIVE RELIABLE INFORMATION TO INTENDING INVESTORS AND OTHERS.

Highest references given if required.  
Bankers: Devon and Cornwall Bank, Liskeard.

**FOR SALE, A SEMI-PORTABLE PIT SINKING, COAL WINDING, AND PUMPING ENGINE,** double 9½ in. cylinder, fitted with link-motion reversing gear, mounted on a multitubular boiler, with Bowling iron fire-box; Also WINDING GEAR, drum 5 ft. diameter, brake, and PUMPING GEAR complete, ready for immediate delivery.

To be seen at—  
BARROWS AND STEWART'S WORKS, BA BURY, OXON.

**TO BE SOLD, BY PRIVATE TREATY, TWO HUNDRED VERY SUPERIOR 8-TON COAL WAGONS,** built by OLIVE, of Wigan.

For further particulars, apply in writing to "Box 200," MINING JOURNAL Office, 26, Fleet-street, E.C.

**HENRY WIGGIN AND CO.** (LATE EVANS AND ASKIN), NICKEL AND COBALT REFINERS BIRMINGHAM.

**JACKSON AND BUTTERFIELD,** ANALYSTS AND ASSAYERS, Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and other Ores. ASSAYING TAUGHT.

106, QUEEN VICTORIA STREET, LONDON, E.C.

**GEO. G. BLACKWELL,** PURCHASER OF MANGANESE, ARSENIC, FLUOR-SPAR, WOLFRAM, BLENDE, CALAMINE, CARBONATE AND SULPHATE OF BARYTES, ANTIMONY ORE, CHROME ORE, MAGNESITE, EMERY STONE, PUMICE STONE, OCHRES AND UMBERS, CHINA CLAY, LEAD ORE FOR POTTERS, TALC, PHOSPHATE OF LIME, &c.

26 CHAPEL STREET, LIVERPOOL.

**MESSRS. J. TAYLOR AND CO.,** MINING ENGINEERS AND INSPECTORS, 86, LONDON WALL, LONDON, E.C.

Have Agents in the various Mining Districts of Great Britain, the Continent, Australia, and the United States of America. Inspections undertaken either personally or by our Agents, and Reports or Advice as to Working given.

## COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY. DISTRICT UNDER THE CHARGE OF J. P. BAKER, Esq., H.M. INSPECTOR OF MINES.

**NOTICE IS HEREBY GIVEN,** that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 25th day of January, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must, on or before the 20th day of January, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.

By order of the Board, W. BLAKEMORE, Secretary.  
Heath Town, Wolverhampton. N.B.—Persons who do not reside within the district are equally eligible for examination with those who do.

## COALS.

**TENDERS WILL BE RECEIVED** until Two o'clock on TUESDAY, the 25th instant, for LAND ENGINE, SMITHERY, AND GAS COALS FOR HER MAJESTY'S DOCKYARD EXTENSION WORKS.

Forms of Tender, containing conditions of Contract and all particulars, may be obtained on personal application at this Office, or by letter, addressed "Director of Navy Contracts, Admiralty, Whitehall, S.W."

JOHN COLLETT, Director of Navy Contracts. Contract Department, Admiralty, Whitehall, S.W., 6th January, 1881.

**THE TANKVILLE MINING COMPANY (LIMITED),** IN LIQUIDATION.

**ALL PERSONS CLAIMING TO BE CREDITORS OF THE ABOVE-NAMED TANKVILLE MINING COMPANY (LIMITED),** are required, on or before the 7th February, 1881, to SEND, in writing, a notice containing THEIR NAMES and ADDRESSES, and the PARTICULARS of their DEBTS or CLAIMS to the Liquidators, addressed to Mr. JOHN HENRY MURCHISON, B. Austinfrans, London, or in default thereof they will be EXCLUDED from the BENEFIT of any DISTRIBUTION of ASSETS made before such notice shall be received.

J. H. MURCHISON, J. H. JERVIS ALFRED, Liquidators. Dated this 31st day of December, 1880.

**SPAIN.—A SITUATION** as ENGINEER in a MINING WORKS is WANTED by a Young Man, formerly a Student of the Ecole des Mines, Paris. Speaks English, Spanish, and French. Address, "Santiago B.," 22 bis, Avenue de St. Cloud, Versailles, France.

**ESPAÑA.—Un Joven salido de la Escuela de Minas de Paris,** desea SITUACION de INGENIERO. Habla Español, Inglés, y Francés. Direcciones, "Santiago B.," 22, Avenue de St. Cloud, Versailles, Francia.

**METALLURGICAL ENGINEER,** shortly at liberty, SEEKS RE-ENGAGEMENT as MANAGER of SMELTING WORKS. Educated at Freiberg. Experienced in planning and erecting metallurgical plant, specially lead smelting and desilvering, and in general and technical management. Practised chemist and assayer. At present Assistant Manager of one of the largest Lead and Silver Works in Europe. Highest testimonials and references. Address, "G. B. W.," care of Messrs. G. Street and Co., 30, Cornhill, E.C.

**MINING PROPERTY TO BE DISPOSED OF.**

**THE PROPRIETORS** of a VALUABLE MINING SETT, near ASHBURTON, are prepared to GRANT a LEASE for the FUTURE WORKING THE SAME, with the SALE of the MACHINERY and PLANT, comprising PUMPING and DRAWING ENGINES, BOILERS, PITWORK, with other MATERIALS.

For particulars apply, "The Proprietors," Druid Mine, Ashburton, Devon.

## COLLIERY MANAGER.

**WANTED, for a COLLIERY** of considerable magnitude, a CERTIFICATED MANAGER. He must have thorough Mechanical and Engineering Experience, and accustomed to working "Long Wall." Age from 30 to 40 years. Applications, with copies of testimonials and all needful particulars, to be addressed "Colliery Manager," office of the *Daily Post*, Birmingham.

**WANTED, A FEW TONS OF GOLD QUARTZ IN LONDON.** Yield of Gold of no importance, it being required only to illustrate, in London, the advantages of a new stamping machine. Apply to FRANK TAYLOR, Sandycroft, near Chester.

**WANTED, a 30-horse power HORIZONTAL DOUBLE CYLINDER HIGH-PRESSURE STEAM-ENGINE;** also, a 40-horse power BOILER, Galloway principle. New or second-hand. Apply to the SECRETARY of the Wetherston Barytes and Lead Mining Company, 71, Tower Buildings, Liverpool.

**ANALYTICAL CHEMIST WANTED.**—One accustomed to the Wet Assay of Copper, and the Analysis of Iron, China Clay, Phosphates, Nitrates, Manures, &c. One who has had practical experience in a Laboratory preferred.

Apply by letter, stating salary required, and giving testimonials, &c., to "B.R.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**A PRACTICAL MINING AGENT,** 36, holding good certificates for machinery, desires EMPLOYMENT where he could make himself generally useful. Drawing, Dialing, Assaying, French, and German. Worked nine years underground. Address, "Miner," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**TO SPECULATIVE CAPITALISTS**—SEVERAL REAL GOOD AND PROGRESSIVE SHARES in GOLD, SILVER, COPPER, TIN, and LEAD MINES, also in other Companies, can be OBTAINED A BARGAIN, if bought at once. Address, "Nemo," Target Office, Green-lane, Newland, Hull.

**SILVER-LEAD MINE, EAST CORNWALL.—A NEW LODE** has been DISCOVERED within 3 fathoms of surface, producing good work for lead, which, per assay, is worth for silver 28 ounces per ton and for lead 62 per cent.

Parties desirous of forming a company to work the Mine are requested to apply to—  
Mr. W. D. KING, Solicitor, Camelford.

**PRINCE OF WALES SLATE QUARRY.—SHAREHOLDERS** wishing to SELL THEIR SHARES are invited to communicate (stating lowest price), with "J. F.," care of J. W. Vickers, 5, Nicholas-lane, Lombard-street, E.C.

**FOR SALE, BY PRIVATE CONTRACT,** a 36-inch cylinder STAMPING ENGINE, BOILER, and 48 HEADS OF STAMPS; ONE 24-inch WINDING ENGINE and BOILER. Address, "Box 14," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

**THE RUBY AND DUNDERBERG CONSOLIDATED MINING COMPANY (LIMITED).**

Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD at the offices of the company, 5, Crosby Square, London, on FRIDAY, the 14th day of January, 1881, at One o'clock, to confirm the special resolutions passed at the Extraordinary General Meeting of the Members of the Company, held at the Cannon-street Hotel, on Wednesday, the 15th day of December last.

**FRONTINO AND BOLIVIA COMPANY.**

Notice is hereby given, that the Directors of the Company have this day DECLARED a DIVIDEND of TWO SHILLINGS (2s.) PER SHARE (free of income tax) PAYABLE on and after the 12th day of January, 1881, at the Imperial Bank, Lothbury, E.C.

By order of the board, J. JAMESON TRURAN, Secretary.

**MINE "EL CALLAO,"** GUAYANA, VENEZUELA.

COUPONS OF SHARES..... 322

Gold in bars produced in the month of November, 1880, and remitted to Messrs. Baring Brothers and Co., London, 4691.95 ozs.

DIVIDEND distributed for each coupon, \$100.

(Signed) A. LICCIONI, President.

(Signed) VICTOR T. GRILLET, Treasurer.

**STONE BREAKERS AND CRUSHING MACHINERY** for REDUCING to any degree of fineness all kinds of ORES, QUARTZ, COAL, CEMENT, PAINT, &c.

Particulars and specifications on application to "Quartz," MINING JOURNAL Office, 26, Fleet-street, London.

**MESSRS. J. TAYLOR AND CO.,** MINING ENGINEERS AND INSPECTORS, 86, LONDON WALL, LONDON, E.C.

Have Agents in the various Mining Districts of Great Britain, the Continent, Australia, and the United States of America. Inspections undertaken either personally or by our Agents, and Reports or Advice as to Working given.

## MACNAB'S SYSTEM OF

## BLASTING WITH WATER IN COAL MINES, &c.

**GUNPOWDER MADE HARMLESS & SMOKELESS.**

**MOST IMPORTANT DISCOVERY.**

The Macnab Patent Safety Hydraulic Cartridges ensure the following results.—  
SUMMARY.

- 1.—Perfect safety.
- 2.—Complete absence of flash or flame.
- 3.—Complete absorption of smoke and gases.
- 4.—Undisturbed ventilation.
- 5.—Immediate resumption of work after blasting.
- 6.—Complete and instantaneous combustion of the charge.
- 7.—Complete control of the explosive force.
- 8.—Two or more charges in the coal face under the old system, usually done by one under this.
- 9.—Modification of explosive pressure to any desired extent, resulting in a minimum of small coal.
- 10.—Uniform distribution of the explosive pressure over any desired surface, when covered by the hydraulic cartridge, which in "pillaring" slate rock is of the utmost importance.
- 11.—Saving of half the powder, &c., used in ordinary blasting.
- 12.—Almost complete absence of concussion.
- 13.—"Blown-out" shots made impossible.

Full particulars to be had only of—

**THE MACNAB PATENT SAFETY HYDRAULIC COMPANY (LIMITED),** 11, QUEEN VICTORIA STREET, LONDON, E.C.

## IMPORTANT NOTICE.

The Royalty upon the Patent is fractionally charged in the price of the Hydraulic Cartridge. They are all chemically closed at one end, and have the Royal Blue Label and Trade Mark of the Company.

**AIR-COMPRESSOR FOR SALE.**—Vertical Direct-Acting, combined with Steam Engine. Jack-studded Air Cylinder, 10½ in. diameter: steam cylinder, 11 in. diameter, 18 in. stroke. Other sizes in progress.

ALEX. WILSON AND CO., ENGINEERS, VAUXHALL IRONWORKS, WANDSWORTH ROAD.

**ALEXANDER SMITH, M. Inst. C.E., CONSULTING ENGINEER** and VALUER of IRONWORKS, MINING, RAILWAY, ENGINEERING, and other PROPERTY, PLANT, and MACHINERY, 1, PRIORY STREET, DUDLEY.

Mr. SMITH has been retained for nearly 20 years by some of the most prominent firms, and has conducted many of the largest valuations that have taken place in the kingdom.

Valuations for Stock Taking or any other purpose upon reasonable terms.

**HENRY NUTT AND CO.,** 57, BRISTOL ROAD, BIRMINGHAM, PURCHASERS OF LEAD ASHES, LEAD SLAGS, SULPHATE OF LEAD, TIN ASHES, TERNE ASHES, AND ALL REFUSE CONTAINING TIN AND LEAD.

**J. S. MERRY,** ASSAYER AND ANALYTICAL CHEMIST SWANSEA SUPPLIES ASSAY OFFICE REQUIREMENTS AND RE-AGENTS.

**THE "JAMIN" PATENT ELECTRIC LIGHT** COMPAGNIE GENERALE D'ECLAIRAGE ELECTRIQUE. Capital, 8,000,000 Francs.

Proprietors of the Gramme Patent Machine for Alternate Current J. A. BERLY, C.E., A.S.T.E., &c., Engineer, and Sole Agent for Great Britain and the Colonies 16, NEW BRIDGE STREET, LONDON.

Now ready, price 6d., post free 6½d.

**GOLD MINING IN INDIA: ITS PAST AND PRESENT.**

By JER. RYAN, Assoc. I.C.E.

London: KENSINGTON and Co., 2, George-street, Mansion House, E.C.

**CALIFORNIAN AND EUROPEAN AGENCY.** 509, MONTGOMERY STREET, SAN FRANCISCO, CAL.

E. J. JACKSON, Manager.

**MR. WILLIAM BREDEMAYER, MINING, CONSULTING** and CIVIL ENGINEER, U.S. MINERAL SURVEYOR for UTAH and IDAHO. NOTARY PUBLIC.

Geological examinations; reports on mining properties; surveys mines, rail roads, and canals, and superintends the workings of the same; prepares estimates and plans for opening and working mines. Expert on mining questions before the Courts. Address, P.O. Box 1157, Salt Lake City, Utah.

**CAPTAIN ABSALOM FRANCIS, M.E.,** GOGINAN, ABERYSTWITH.

**COPPER ORES.** Sampled Dec. 22, and sold at Swansea, Jan. 4.

Mines. Tons. Produce. Price. Mines. Tons. Produce. Price.  
Betts Cove Ore 107 7½ £4 6 0 Cavaiera Ore 79 7½ £4 5 6  
ditto 106 7 4 6 0 ditto 79 7½ 4 6 6  
ditto 106 7 4 6 0 ditto 79 7½ 4 7 0  
ditto 115 7 4 1 6 Berhaven Ore 88 7½ 4 8 0  
ditto 115 6½ 4 1 0 ditto 96 7½ 4 11 6  
ditto 115 6½ 4 1 6 Burnt Ore 177 2½ 0 15 0  
ditto 115 7 4 2 6 Copper Ore 38 26½ 16 1 6  
ditto 115 7 4 3 0 ditto 26 26½ 16 1 6  
ditto 115 6½ 4 1 0 ditto 16 25½ 15 10 6  
Cavaiera Ore 79 7½ 4 7 0 Copper Reg. 11 29½ 17 16 0

TOTAL PRODUCE.

Betts Cove Ore 1009 £4194 19 0 Burnt Ore 177 £132 15 0  
Cavaiera Ore 318 1365 14 0 Copper Ore 76 1212 18 0  
Berhaven Ore 194 870 8 0 Copper Reg. 11 195 16 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names. Tons. Amount.  
Copper Miners' Company 477½ £1,982 9 0  
P. Grenfell and Sons 539½ 1,681 17 9  
Vivian and Sons 109 627 0 0  
Williams, Foster, and Co. 427 2,740 12 0  
Mason and Elkington 230 941 11 3

Total. 1783 £7,973 10 0

NO SALE January 18.

TOTALS AND AVERAGES.

21 cwt. Produce. Price. Per unit. Standard  
Whole sale 1783 7½ £4 9 5 11s. 8d. £84 16 9



# HADFIELD'S STEEL FOUNDRY COMPANY.

AWARDED THE ONLY GOLD MEDAL,

AT SYDNEY EXHIBITION, 1880,  
FOR STEEL CASTINGS.

AWARDED THE ONLY GOLD MEDAL AT PARIS EXHIBITION,  
1878, FOR CRUCIBLE STEEL CASTINGS. FIRST PRIZE  
MEDALS AT LEEDS, WREXHAM, AND MANCHESTER EXHIBITIONS  
1875 AND 1876. AND THE HIGHEST AWARD FROM THE  
MINING INSTITUTE OF CORNWALL, 1878.

AWARDED THE ONLY GOLD MEDAL.

AT SYDNEY EXHIBITION, 1880,  
FOR STEEL CASTINGS.

ATTERCLIFFE, SHEFFIELD,

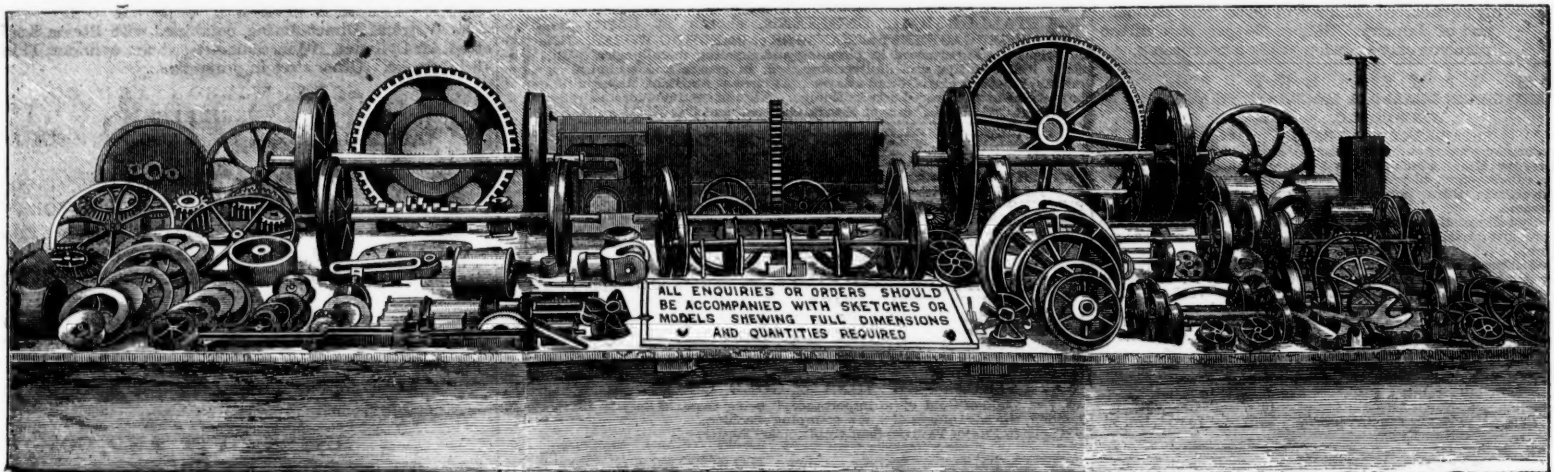
MANUFACTURERS EXCLUSIVELY OF

Crucible and Cast Steel Castings,  
FOR  
Engineering & Mining Purposes,

AND ARE THE SOLE MAKERS OF

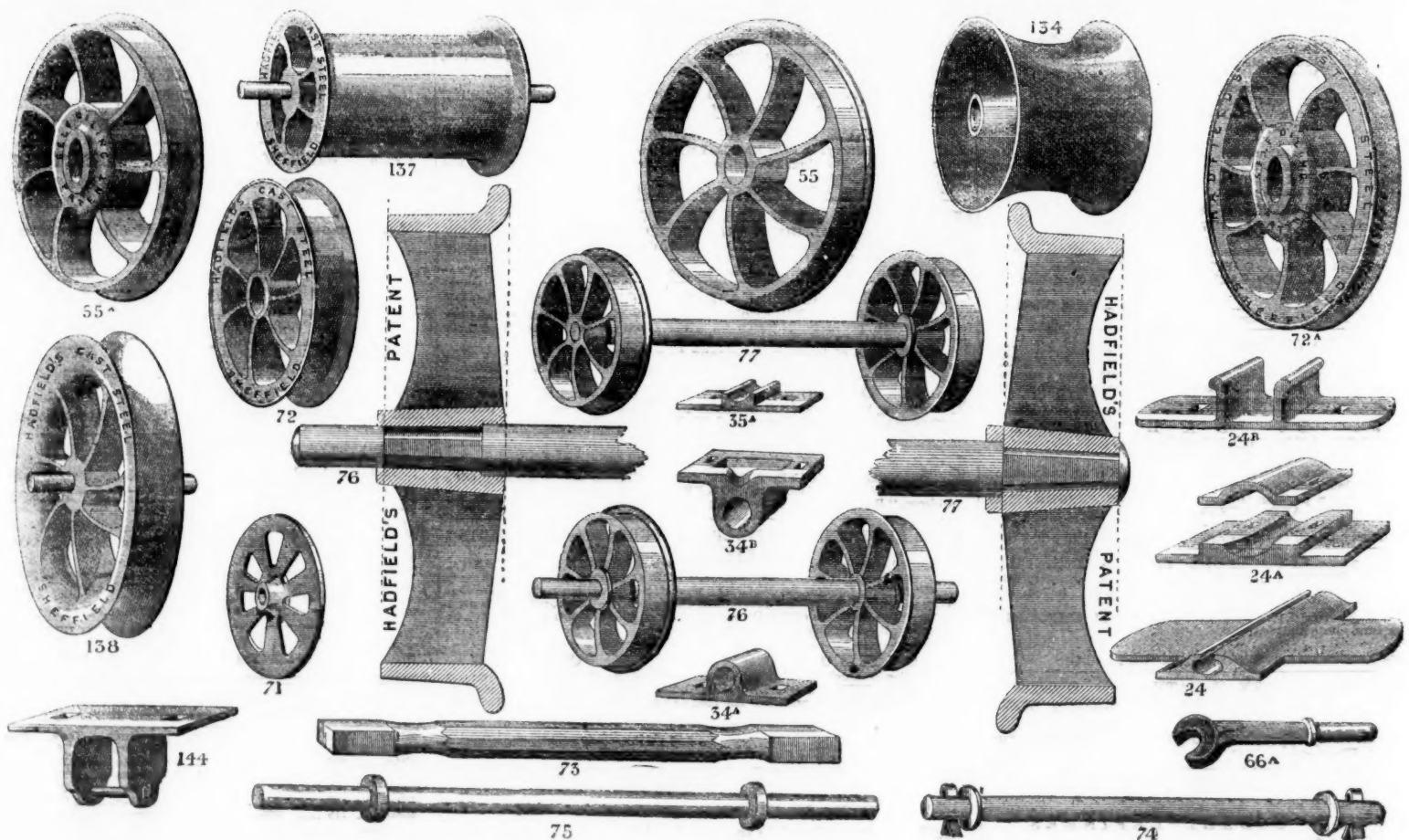
## HADFIELD'S CAST STEEL WHEELS.

One of our departments is specially adapted for the manufacture of these Wheels (as shown below), for Collieries, Ironstone Mines, Slate Quarries, Ironworks, Lead Mines, &c. &c. We have made, and are now making, many HUNDRED THOUSANDS; and having Patented a New Method of Fitting Wheels upon axles, being cheap, effective, and expeditious, we can execute orders entrusted to us with promptitude, our capacity in this department alone being equal to about 2000 wheels per week.



ALL ENQUIRIES OR ORDERS SHOULD  
BE ACCOMPANIED WITH SKETCHES OR  
MODELS SHOWING FULL DIMENSIONS  
AND QUANTITIES REQUIRED

N.B.—Prices per Set of Wheels and Axles fitted complete, forwarded on receipt of diameter of wheel  
on tread, depth of tread, real gauge, and thickness of axles and rolling load.



[This Sheet of Drawings is Copyright]

### HADFIELD'S PATENT METHOD OF FITTING WHEELS UPON AXLES.

The advantages of the above system are that the Wheels being forced upon a Taper Square-ended Axle, by Machinery, and then riveted (the machine securing truth), it is impossible that they can come loose or get within gauge. They are very cheaply fitted on, and run exceedingly true.

We construct the Arms of wheels upon the curved principle (as shown in the drawings above), consequently the shrinkage or cooling of the Castings is not interfered with, thus securing the greatest advantages of our very strong material.

CRUCIBLE CAST-STEEL WHEELS, when cast by us, are made from one-third to one-half lighter than Cast-Iron. They cannot be broken while working, even with rough usage and will wear at least twelve times as long as Cast Iron, thus saving animal and steam power, and reducing wear and tear immensely.

We would also draw special attention to our INCLINE PULLEYS and CAGE GUIDES the adoption of which will prove highly advantageous.

MACHINE MOULDED STEEL GEAR WHEELS OF EVERY DESCRIPTION.



# NOBEL'S DYNAMITE



Manufactured and sold by

**NOBEL'S EXPLOSIVES COMPANY (LIMITED), 149, West George Street, Glasgow.**

AGENTS EXPORT: J and G. THORNE, 85, GRACECHURCH STREET, LONDON, E.C.

Factories—ARDEER WORKS, STEVENSTON, Ayrshire.

WESTQUARTER WORKS, POLMONT STATION, STIRLINGSHIRE.

## TONITE, OR COTTON POWDER.

THE SAFEST, CHEAPEST, AND STRONGEST OF ALL EXPLOSIVES.

RECOMMENDED TO MINERS PIT SINKERS, QUARRYMEN AND CONTRACTORS  
AS THE MOST EFFICIENT AND ECONOMICAL BLASTING AGENT EVER INVENTED.

OFFICES:

**23, QUEEN ANNE'S GATE, LONDON, S.W.**

Agents DINEEN, SON, and Co., Leeds; DAVID BURNS, Haltwhistle; R. J. CUNNACK, Helston, Cornwall; J. and W. SMITH, Chapel-en-le-Frith; W. VEITCH, Jedburgh, N.B.; W. HARRISON, Barrow-in-Furness.

## PATENT DETONATORS.

**FIRST-CLASS DETONATORS** MANUFACTURED FOR THE TRADE ON THE MOST FAVOURABLE TERMS.

Apply to—

The COTTON POWDER COMPANY (Limited), 23, Queen Anne's Gate, London, S.W.

## THE TUCKINGMILL FOUNDRY COMPANY,

(TUCKINGMILL FOUNDRY AND ROSEWORTHY HAMMER MILLS),  
CAMBORNE, CORNWALL,

Engineers, Iron and Brass Founders, &c.



REGISTERED TRADE MARK.

MANUFACTURERS OF EVERY DESCRIPTION OF

REGISTERED TRADE MARK.



**PUMPING, WINDING, AND STAMPING ENGINES**

ALL KINDS OF

**MINING MACHINERY, SHOVELS, AND MINERS' TOOLS;**

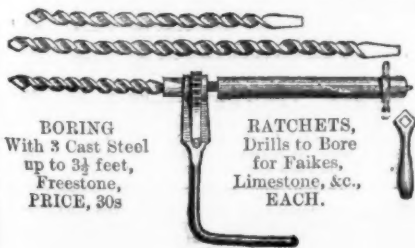
ALSO OF

**BLAKE'S STONE BREAKERS.**

ESTIMATES GIVEN UPON INDENTS AND SPECIFICATIONS.  
ILLUSTRATED CATALOGUES POST FREE ON APPLICATION  
LONDON OFFICE: 85, GRACECHURCH STREET, E.C.

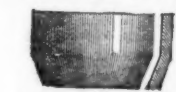
## ARCHIBALD BAIRD AND SON,

Depot for Colliery Specialities: B67, ROBERTSON STREET,  
GLASGOW.

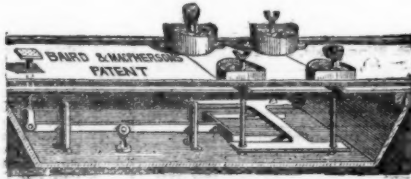


BORING  
With 3 Cast Steel  
up to 3½ feet,  
Freestone,  
PRICE, 30s

RATCHETS,  
Drills to Bore  
for Faikes,  
Limestone, &c.,  
EACH.



BAIRD'S IMPROVED  
SOLID MOULDED  
GUTTA PERCHA  
PUMP BUCKETS  
Price, 3s. 9d. per doz.



BAIRD AND MACPHERSON'S PATENT TUB GREASER

For Excellence  
and Practical Success  
of Engines.



Represented by  
Model exhibited by  
this Firm.

**HARVEY AND CO.,**

ENGINEERS AND GENERAL MERCHANTS  
HAYLE, CORNWALL

LONDON OFFICE.—186, GRESHAM HOUSE, E.C.

MANUFACTURERS OF

PUMPING and other LAND ENGINES and MARINE STEAM ENGINES  
of the largest and most approved kinds in use, SUGAR MACHINERY,  
MILLWORK, MINING MACHINERY, and MACHINERY IN GENERAL.

SHIPBUILDERS IN WOOD AND IRON.

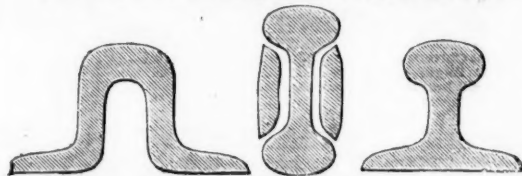
MANUFACTURERS OF

HUSBAND'S PATENT PNEUMATIC STAMPS

SECOND-HAND MINING MACHINERY FOR SALE,  
IN GOOD CONDITION, AT MODERATE PRICES—viz.

PUMPING ENGINES; WINDING ENGINES; STAMPING ENGINES;  
STEAM CAPSTANS; ORE CRUSHERS; BOILERS and PITWORK of  
various sizes and descriptions; and all kinds of MATERIALS required for  
MINING PURPOSES.

**JOHN BEATSON & SON,**  
40h, St. Mary's Gate, Derby.



IRON AND STEEL RAILS, of all sections, from 10 to 86 lbs. per  
yard, new perfect, new slightly defective, or second-hand, with Fish plates  
Bolts and Nuts, Chairs, Spikes, and Points and Crossings to match, when re-  
quired.

STEEL AND IRON WIRE ROPES, LOCOMOTIVE ENGINES, &c., &c.

BAHS, PLATES, SHEETS, &c.

STEEL OF ALL KINDS. PIG IRON OF ALL KINDS

Delivered at all Railway Stations and Ports in Great Britain

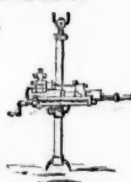
**DUNN'S**

## IMPROVED ROCK DRILL.



This DRILL is of GREAT  
STRENGTH and SIMPLICITY  
SECOND TO NONE IN THE  
KINGDOM.

We are prepared to SUPPLY  
our well known MACHINES at  
greatly REDUCED PRICES—  
from £35, according to calibre  
of cylinder



ESTIMATES GIVEN FOR PLANTS, &c., &c.

**Dunn's Patent Rock Drill Company**

(LIMITED),

OFFICE,—193, GOSWELL ROAD,  
LONDON, E.C.

MONEY LENT, at EIGHT, NINE, and TEN PER CENT, on  
FIRST MORTGAGE OF FREEHOLDS for IMPROVEMENTS and  
TACKLING, said freeholds in the Province of MANITOBA.  
Address, HERBERT C. JONES, Solicitor, 20, Masonic Hall, Toronto.

**THE NEWCASTLE DAILY CHRONICLE**  
(ESTABLISHED 1784).

CHRONICLE AND NORTHERN COUNTIES ADVERTISER  
Offices, Westgate-road, Newcastle-upon-Tyne; 50, Howard-street, North  
Shields, 195, High-street, Sunderland.

**W. TREGAY, Mining Engineer, REDRUTH,**  
Having had many years' practical experience in Metallic Mines, is  
prepared to INSPECT, REPORT, and ADVISE on every description  
of MINERAL PROPERTY

MEXICO, NEW MEXICO ARIZONA, UTAH, NEVADA  
AND CALIFORNIA.

**F. M. F. CAZIN,**  
MINING AND CIVIL ENGINEER,  
At BERNALLILLO, NEW MEXICO, U.S. OF AMERICA.

Has 24 years' experience in Mining and Smelting, and 10 years experience in  
American Business and Law, offers his services at moderate charges for Reporting  
on Mining and other Property in any of the above-named States or Territories  
gives correct, safe, and responsible advice as to securing full titles and possession  
and, as to best mode of utilising the property, will assist in settling existing diffi-  
culties by compromise, and in disposing of developed mining property when held  
at real value; offers his assistance for securing undeveloped mining properties at  
home prices. As to care taken in reporting, reference is made to the Mining Journal  
Supplement, April 1, 1876, containing a report on property of the Maxwell Land  
Grant and Railway Company; as to technical standing, to the prominent men of  
the trade—compare Mining Journal of Aug. 30 and Nov. 31, 1872, and New York  
Engineering and Mining Journal, Feb. 28, 1874.

Second Edition. Just Published, price 2s. 6d.

**A NEW GUIDE TO THE IRON TRADE**  
OR MILL MANAGERS' AND STOCK-TAKERS' ASSISTANT;  
Comprising a Series of New and Comprehensive Tables, practically arranged to  
show at one view the Weight of Iron required to produce Boiler-plates, Sheet-iron,  
and Flat, Square, and Round Bars, as well as Hoop or Strip Iron of any dimensions.  
To which is added a variety of Tables for the convenience of merchants, including  
a Russian Table.  
By JAMES ROSE.  
Batman's Hill Ironworks, Bradley, near Bilston.

OPINIONS OF THE PRESS.

"The Tables are plainly laid down, and the information desired can be instantly  
obtained."—Mining Journal.  
"900 copies have been ordered in Wigan alone, and this is but a tithe of those  
whom the book should commend itself."—Wigan Examiner.  
"The Work is replete on the subject of underground management."—M. BAKER  
Colliery Proprietor.  
To be had on application at the MINING JOURNAL Office, 26, Fleet-street, London

Just published.

**THE NORTH WALES COAL FIELD**  
Being a series of Diagrams showing the Depth, Thickness, and Local Names  
of the Seams in the principal Collieries of the various districts, with Index, Geo-  
logical Map, and horizontal sections across the Ruabon, Brymbo, Buckley, and  
Mostyn districts.  
By JOHN BATES GREGORY and JESSE PRICE,  
of Hope Station, near Mold, Flintshire.

Price: Mounted on holland, coloured and varnished, and fixed on mahogany  
rollers, 30s. each; or in book form, 12x9, mounted and coloured, 25s. each.  
May be obtained, by order, of all Booksellers or direct from the MINING  
JOURNAL Office, 26, Fleet-street, London, E.C., upon remittance of Post Office  
Order for the amount

DEBILITY AND NERVOUSNESS.

Free Edition, 152 pages, post free, in envelope, two stamps. The  
**WARNING VOICE.**—A Special Medical Book for Young Men  
on the Cause, Consequence, and Treatment of certain forms of Debility  
and Nervousness, viz.—Mental and Physical Depression, Palpitation of the Heart,  
Noises in the Head and Ears, Impaired Sight and Memory, Indigestion, Pains in  
the Back, Headache, Piles, Constipation, Hysteria, Dizziness, Local Weakness,  
Muscular Relaxation, Nervous Irritability, Blushing, &c., resulting from Exhaustion  
of Nervous power, effect of Overwork, City Life, Worry, Brain Teal, Intemper-  
ance, and other abuses of the system.  
Address—Dr. H. SMITH, 8, Burton Crescent, London W.C.



## THE MINING SHARE LIST.

## BRITISH DIVIDEND MINES.

Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3939 Blue Hills, t, c, St. Agnes	4	6	2 1/2	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0
10000 Caron, t, Cardigan	2	0	0	0	0	0

## FOREIGN DIVIDEND MINES.

Shares.	Divid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35500 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0
10000 Almaden, t, Spain	2	0	0	0	0	0

## NON-DIVIDEND BRITISH MINES.

Shares.	Divid.	Last wk.	Clos. pr.
25600 Aberllyn, t, bl, Carnarvon	1	0	0
12000 Aasheton, t, Carnarvonshire	1	0	0
10000 Atlantic, t, (res. shares 28,000)	1	0	0
11553 Bedford Unit, t, Tavis. (21 sh.)	1	0	0
25600 Belvedere, t, Rochewald	1	0	0
600 Bendigaid, t, Wales	1	0	0
30000 Bettw-y-Coed, t, (20,000 sh. issued)	1	0	0
30000 Blaen Caelan, t, Cardigan	1	0	0
30000 Bodidris, t, bl, Denbighshire	1	0	0
800 Botallack, t, c, St. Just	1	0	0
10000 British, t, Wrexham	1	0	0
20000 Bwlch United, t, Cardigan	1	0	0
50000 Cambrian, t, c, Cardigan	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0
50000 Carn Carnarvon, t, c, Carnarvon	1	0	0

## NON-DIVIDEND MINES—continued.

Shares.	Divid.	Last wk.	Clos. pr.
3500 New Tincroft, t, Lelant	1	0	0
6000 New West Caravan, t, Liskeard	1	0	0
3000 New Wheal Pevor, t, Redruth	1	0	0
35000 New Wye Valley, t, Montgomery	1	0	0
20000 North Alfred, t, Phillack	1	0	0
10000 N. D'Eresby Mount, t, bl, Carnarv.	1	0	0
12000 North Herodsfoot, t, Liskeard	1	0	0
2000 North Levant, t, c, St. Just	1	0	0
50000 North Molton, t, c, m, t, Devon	1	0	0
6000 North Penrith, t, c, Gwennap	1	0	0
2336 North Trekerby, t, c, St. Agnes	1	0	0
8000 Northern, t, Durham	1	0	0
12000 Pandora, t, c, Carnarvon	1	0	0
11612 Pant-y-Mwyn, t, Mold	1	0	0
20000 Parka Mines Consols, t, St. Columb	1	0	0
6000 Parracombe, t, c, Devon	1	0	0
45000 Parys Corporation, t, c, Anglesea	1	0	0
7500 Pateley Bridge, t, Yorkshire	1	0	0
15000 Ditto (also 7500 sh. not issued)	1	0	0
6000 Pedn-an-drea, t, Redruth	1	0	0
6000 Pen-y-Ore, t, c, Carnarvon	1	0	0
12000 Pen-y-Ore, t, c, Carnarvon	1	0	0
12000 Plympton, t, Llanidloes	1	0	0
10000 Polrose, t, Cornwall	1	0	0
10000 Port Nigell, t, c, Carnarvonshire	1	0	0
12000 Prince of Wales, t, c, Calstock	1	0	0
50000 S. Cambrian, t, c, Cardigan	1	0	0
30000 South d'Eresby Mount, t, c	1	0	0
35000 S. Devon Unit, t, c, Bucklefield	1	0	0
6000 South Penrith, t, c, Gwennap	1	0	0
6000 South Roskear, t, c, Carnarvon	1	0	0
6000 South Toller, t, c, Carnarvon	1	0	0
40000 South Wheal Croft, t, c, Tavitock	1	0	0
2043 South Wheal Croft, t, c, Tavitock	1	0	0
4000 St. Just United, Cornwall	1	0	0
30000 Talybont, t, c, Cardigan	1	0	0
40000 Tamar, t, c, Bealston	1	0	0
6400 Teesdale, t, c, Durham (pref.)	1	0	0
20000 Tin Hill, t, c, Stephens	1	0	0
10000 Temple, t, c, Cardigan	1	0	0
5000 Treleigh Wood, t, Redruth	1	0	0
12000 Trevelyan Consols, t, c, Gwennap	1	0	0
6000 Trugo, t, c, St. Columb	1	0	0
640 Truro, t, c, Nequiss, Flintshire	1	0	0
10000 Tyn-y-Fron, t, c, Cardigan	1	0	0
11000 Un. Van & Glyn, t, c, (41,500 other sh.)	1	0	0
10000 Vaughan, t, c, Cardigan	1	0	0
18000 Victor, t, c, Cilcen, Flintshire	1	0	0
15000 Vincent, t, c, Altarnun	1	0	0
12000 West Ashton, t, c, Carnarvon	1	0	0
6000 West Caradon, t, c, St. Cleer	1	0	0
3000 West Craven Moor, t, c, Pateley Bridge	1	0	0
10240 West Devon Consols, t, c, Calstock	1	0	0
10000 West Godolphin, t, c, Breage	1	0	0
12000 West Holway, t, c, Flintshire	1	0	0
6000 West Kitt, t, c, St. Agnes	1	0	0
20000 W. Lisburne, t, c, (11 sh.) Cardigan	1	0	0
3000 West Mary Ann, t, c, Menheniot	1	0	0
20000 West Pateley Bridge, t, c, Yorkshire	1	0	0
12000 West Phoenix, t, c, Cardigan	1	0	0
5130 West Poldice, t, c, Breage	1	0	0
10000 West Vor, t, c, Breage	1	0	0
2048 West Wheel Franks, t, c, Illogan	1	0	0
3000 West Wheal Pevor, t, c, Redruth	1	0	0
12000 West Wye Valley, t, c, Montgomery	1	0	0
6000 Wheal Agar, t, c, Illogan	1	0	0
6144 Wheal Bassett, t, c, Illogan	1	0	0
3000 Wheal Boys, t, c, Redruth	1	0	0
12000 Wheal Croft, t, c, St. Agnes	1	0	0
2585 W. Cornford, t, c, Gwennap	1	0	0
15000 Wheal George, t, c, bl, Carnarvon	1	0	0
6000 Wheal Grenville, t, c, Camborne	1	0	0
12238 Wheal Jane, t, c, Kea	1	0	0
12000 Wheal Jewel, t, c, St. Hilary	1	0	0
25000 Wh. Honey and Trelawny, t, c, Lisk.	1	0	0
2000 Wheal Owles, t, c, St. Just	1	0	0
6000 Wh. Prussia, t, c, Redruth	1	0	0
12000 Wheal Russell, t, c, Tavitock	1	0	0
6000 Wheal Sisters, t, c, Lelant	1	0	0
4000 Wheal Ury, t, c, Redruth	1	0	0
4000 Ystwith, t, c, Cardigan	1	0	0

bl, blende; c, copper; g, gold; l, lead; s, silver; sl, slate;  
s, silver-lead; t, tin; z, zinc; i, iron; a, arsenic.  
\* Limited Liability Companies; † quoted on the Stock Exchange;  
‡ have paid dividends.

## NON-DIVIDEND FOREIGN MINES; FOREIGN AND MISCELLANEOUS STOCKS; TRAMWAYS; INSURANCE COMPANIES; GAS, IRON AND COAL, WAGON COMPANIES, &amp;c.

## NON-DIVIDEND FOREIGN MINES.

Shares.	Divid.	Last wk.	Clos. pr.
12000 Arendal, c, Norway	4	0	0
3000 Blue Tent, t, hyd, California	5	0	0
4000 Brazilian, t, c, Brazil	1	0	0
10000 Buena Ventura, t, Spain (22 sh.)	1	0	0
15000 Canada, t, c, Canada	1	0	0
82500 Canadian, t, c, Canada	4	0	0
34433 Cedar Creek, t, c, California	5	0	0
120000 Chontales, t, c, Nicar. (30,000 iss.)	1	0	0
15000 Colar, t, c, Mysore	1	0	0
75000 Colombian Hydraulic, t, c, Colombia	1	0	0
65000 Colorado United, t, c, Colorado	5	0	0
90000 Consolidated Mining	1	0	0
200000 Devala Moya, t, c, Wynaad	1	0	0
100000 Don Pedro North of the River	1	0	0
100000 English Australian, t, c, Victoria	1	0	0
100000 Eschschuer, t, c, California	1	0	0
100000 Frontenac, t, c, Ontario, Canada	1	0	0
100000 Horta, t, c, Spain	1	0	0
12000 Horta, t, c, Spain	1	0	0
100000 Ind. Glenrock, t, c, Wynaad (fy. pd.)	1	0	0
150000 Indian Mammoth, t, c, Chulimula	0	0	0
150000 Indian Phoenix, t, c, Wynaad	1	0	0
100000 I. X. L., t, c, California	1	0	0
50000 Javal, t, c, Nicaragua	2	0	0
50000 Kapanga, t, c, New Zealand	1	0	0
100000 La Plata, t, c, Colorado	1	0	0
65000 London and California, t, c	2	0	0
7587 Lusitanian, Portugal (fy. pd.)	5	0	0
9000 Missouri, t, c, pref. (fully paid)	10	0	0
135000 Mysore, t, c, India	0	0	0
120000 Mysore, t, c, India	1	0	0
40000 Nava de Jadrque, t, c, Spain	1	0	0
100000 New Franto & Boliv., t, c, Colombia	1	0	0
100000 New Gold Run, t, c, hyd, California	1	0	0
200000 Nuv. Monde, t, c, Venez. (en com.)	1	0	0
80000 Pasterena United, t, c, Italy	3	0	0
80000 Pierrefite (20,000 pref.)	1	0	0
25000 Placerville, t, c, California	2	0	0
40000 Ravenscliff, t, c, Zind; c, s, Aust.	0	0	0
8600 Rio Grande del Sul, t, c, (31,000 pref.)	5	0	0
100000 Rossa Grande, t, c, Brazil (21 sh.)	1	0	0
25300 Ruby and Dunderberg, t, c, Nevada	10	0	0
34022 San Pedro, t, c, Chili	1	0	0
100000 S. Indian, t, c, Madras (fully paid)	1	0	0
100000 South-East Wynaad, t, c, India	1	0	0
43174 United Mexican, t, c, Mexico	2	0	0
50000 Virebore, t, c, Rheinbreith, Ger.	1	0	0
75000 Yorke Peninsula, t, c, S. Australia	1	0	0
54800 Yorke Pen., t, c, South Aust. Pref.	1	0	0

## GAS COMPANIES.

Issue.	Shares.	Divid.	Clos. pr.
50000	20	Bahia [L]	all
130000	5	Bombay [L]	all
100000	5	Ditto, New [L]	all
297000	Stk	Brentford Consolidated	100
140000	20	British	all
550000	Stk	Continental	100
200000	20	Do. do. New, 1869, 1872	14 1/2
100000	20	Do. do. 7 per cent. Preference	24 25
234000	10	European [L]	all
94850	Stk	Gaslight and Coke, A. Ord.	177 182
50000	10	Ditto, 5th issue	all
284200	Stk	Do, 4 per cent. Deb. Stock	100 102
5000	10	Hong Kong and China	all
280000	Stk	Imperial Continental	100
386500	Stk	London	173 178
12000	5	Malta & Mediterranean [L]	all
100000	20	Metrop. of Melbourne 6 p.c. Deb.	103 105
250000	20	Monte Video [L]	all
100000	5	Ottoman [L]	all
300000	5	Oriental [L]	all
275000	20	Rio de Janeiro [L]	all
000000	Stk	South Metropolitan, A.	200 205
50000	Stk	Ditto, ditto, B.	177 182

## INSURANCE COMPANIES.

Issue.	Shares.	Divid.	Clos. pr.
50000	100	Alliance British and Foreign	11
10000	100	Ditto, Marine	26 30
50000	30	Commercial and Foreign Marine [L]	4
0000	50	Commercial Union	20 21 pm
0000	50	Eagle	5 5 1/2
5000	20	Globe Marine [L]	11
27500	100	Imperial Life	22 24
13453	100	Indemnity Marine	109 111
10000	10	Lion Fire [L]	2
49626	20	L'pool & Lond. Globe (1 annuity)	2
35862	25	London and Lancashire Fire	25 3/4
40000	25	London and Lancashire Fire	25 3/4
50000	20	Marine and Provincial Marine	18 17 1/2
10000	100	Marine	18 17 1/2
50000	10	Merchants' Marine	2 1/2
50000	10	Maritime	2 1/2
40000	50	North British and Mercantile	8 1/2
30000	100	Northern	5 1/2
40000	25	Ocean Marine	5 1/2
00000	10	Queen	1 1/2
100000	10	Railway Passengers	29 1/2
200000	5	Rock Life	3 1/2
50000	10	Sea	2 1/2
125000	10	Scottish Commercial	2 1/2
4000	20	Standard Marine	4 1/2
10000	20	Thames and Mersey Marine [L]	2 1/2
40000	20	Union Marine, Liverpool [L]	5 1/2
50000	20	Universal Marine [L]	3 1/2

## BANKS.

Issue.	Shares.	Divid.	Clos. pr.
100000	20	Agra [L]	all
80000	20	Anglo-Egyptian Banking [L]	all
30000	40	Bank of Australasia	all
12500	20	Bank of British Columbia	all
20000	50	Bank of British North America	all
10000	25	Bank of Egypt	all
20000	20	Bank of New South Wales	all
100000	10	Bank of New Zealand	all
25000	25	Bank of South Australia	all
40000	50	Bank of Victoria	all
20000	20	Chartered, of Ind., Aust., & China	all
30000	25	Ch. Merc. of Ind., Lond., China	all
20000	100	Colonial	all
50000	20	English Bk. of Rio de Janeiro [L]	all
50000	25	London and River Plate [L]	all
50000	10	London and San Francisco [L]	all
50000	20	London Chartered of Australia	all
100000	11	National Bank of N. Zealand [L]	all
60000	25	Oriental Bank Corporation	all
12500	10	Queensland National [L]	all
34000	100	Stand. of British So. Africa [L]	all
50000	25	Union of Australia	all

## FOREIGN AND MISCELLANEOUS STOCKS.

Issue.	Shares.	Divid.	Clos. pr.
Argentine, 1868, 6 per cent.	all	94	95